

AB 355

LIBRARY

The Chicago Medical Recorder

OFFICIAL JOURNAL

THE AMERICAN ASSOCIATION FOR THE STUDY OF GOITER
TRI-STATE MEDICAL SOCIETY
MEDICO-LEGAL SOCIETY

Entered as Second-Class Matter May 29, 1891, at the Post Office at Chicago, Ill., under Act of March 3, 1879
PUBLISHED MONTHLY. \$2.00 a year. MEDICAL RECORDER PUB. CO., 81 E. Madison St., Chicago

Volume XLVII

AUGUST, 1925

Number Eight

THE PREVENTION OF HYDROPHOBIA (RABIES)

OF LATE a great many cases of rabies in dogs have been reported from various parts of the United States. These reports show that the infection is widely distributed. No section of the country is entirely free from rabies. The dog, from the very nature of his habits, is the main disseminator of this disease.

The physician is called on today as never before to guard his patients against rabies. Only one form of treatment is available—preventive vaccination before the appearance of symptoms.

Few specific prophylactic agents present a record for dependability comparable to that attained by Rabies Vaccine (Cumming). During the many years that Rabies Vaccine (Cumming) has been supplied to the medical profession, not one complaint of distinct failure relating to this product has ever reached the Laboratories. Considering the many thousands of patients treated with Rabies Vaccine (Cumming), this is a truly remarkable record.

The Vaccine is obtainable on short notice by all druggists, being carried in stock under proper conditions for its preservation, by the home laboratory and our various branches.

PARKE, DAVIS & COMPANY

(United States License No. 1 for the Manufacture of Biological Products)

DETROIT - MICHIGAN

RABIES VACCINE (CUMMING) P. D. & CO., IS INCLUDED IN N. N. R. BY THE COUNCIL ON PHARMACY AND CHEMISTRY OF THE AMERICAN MEDICAL ASSOCIATION

Rx

Campho-Phenique Antiseptics

PHYSICIANS—

Try these Prescriptions on your next case and note the result. **Campho-Phenique Liquid** has been tried and tested by many Physicians with excellent results

SUGGESTIONS.

Catarrh (Nasal)

Rx Campho-Phénique Liquid..... $\frac{3}{4}$ i.
Olive Oil [pure]..... $\frac{3}{4}$ iv.
M. Sig. Use as a spray.

Erysipelas.

Rx Campho-Phénique Liquid..... $\frac{3}{4}$ ii.
Olive Oil [pure]..... $\frac{3}{4}$ iii.
M. Sig. Pencil over surface.

Frost Bite

Rx Campho-Phénique Liquid.....
Olive Oil [pure].....aa $\frac{3}{4}$ iv.
M. Sig. Pencil over surface.

Diphtheritic Sore Throat.

Rx Campho-Phénique Liquid..... $\frac{3}{4}$ ii.
Olive Oil [pure]..... $\frac{3}{4}$ ii.
M. Sig. Use as a spray.

CAMPHO-PHENIQUE LIQUID, Small Size 30c, Large Size \$1.20

CAMPHO-PHENIQUE POWDER, Small Size 30c, Large Size 75

Physician's Samples and Literature on request.

CAMPHO-PHENIQUE COMPANY

SAINT LOUIS, MISSOURI. - - - U. S. A.

FOR FIFTY YEARS

eminent physicians all over the country have prescribed and endorsed our well-known and reliable disinfectant.

The constant use of it in the home will prevent the spread of any disease-germ that lurks in the darkest corner.

SAFETY FIRST

Don't wait until sickness comes. Insure yourself against it and protect your health by the immediate use of the absolutely odorless strong and effective

Platt's Chlorides,
The Odorless Disinfectant.

Write for sample and booklet to

HENRY B. PLATT CO.

50 Cliff Street, New York

Remineralization

of the System, following infection or shock, is one of the fundamental axioms of therapeutics.

Compound Syrup of Hypophosphites “FELLOWS”

contains chemical foods in the form of mineral salts and dynamic synergists in an assimilable and palatable compound, and has established its reputation as the *Standard Tonic* for over half a century.

Samples and literature on request

Fellows Medical Manufacturing Co., Inc.
26 Christopher Street - - New York City, U. S. A.

AS AN ANTI-ANEMIC

The one pre-eminently efficient organically combined iron and manganese product for the past 32 years, has been

GUDE'S PEPTO-MANGAN

(LIQUID--TABLET FORM)

DURING all of this time the physician who has not prescribed it has been the exception rather than the rule. This potent blood tonic and general reconstructive is now available in both liquid and tablet form.

*It encourages corpuscular construction
It enhances hemoglobin formation
It aids general tissue oxygenation
It stimulates the failing appetite
It increases general reparative effort*

It is thus of unquestioned and unquestionable value in

**ANEMIC, CHLOROTIC and
DEVITALIZED CONDITIONS**

Our Bacteriological Wall Chart
or our Differential Diagnosis
Chart will be sent to any
Physician upon request.

Literature, samples and further information from

M. J. BREITENBACH CO.

53 Warren Street

New York City

ALKANIZATION and ELIMINATION

A natural alkaline diuretic and eliminant spring water is serviceable in cases characterized by the retention of poisonous waste products.



That's why Mountain Valley Water is coming more and more to be regarded as a useful adjuvant to the other remedies in the treatment of nephritis, rheumatism, gout, certain forms of vascular hypertension, and biliary and intestinal stasis.

In cases of diabetes mellitus, acute fevers, and other diseases frequently associated with acidosis and acidemia, Mountain Valley Water is indicated because its alkaline salts combat the tendency to the concentration of acid radicals in the blood.

Mountain Valley Water, in bottled form, direct from Hot Springs, Arkansas, is now available to your patients.

Case of 12 1/2-gal. bottles \$6.00
Refund for empties..... .75
(Discount to physicians)

WE DELIVER

MOUNTAIN VALLEY WATER CO.

739 W. Jackson Blvd.

Chicago, Illinois

Telephones—Monroe 5460

Glyodine-Bleil

The Ideal Water-Soluble Iodine

FREE from Potash or ALKALI

No Alcohol, Carbondisulphide, Chloroform, Ether, Petrolatum, Phenol or Water, is used in its preparation, which makes it Non-Toxic and Non-Irritant to the skin or the mucosa.

*Samples and literature on request.
For physician's prescriptions only.*

20th Century Chemical Company

501 Altman Bldg.

Kansas City, Mo

The Haphazard Response



DESHELL STARCHLESS AGAR FLAKES

So much interest has been created in the superior American made agar used in PETROLAGAR that we have decided to place it on the market as DESHELL STARCHLESS AGAR FLAKES, for the physician who, in certain cases, may wish to prescribe agar.

DESHELL STARCHLESS AGAR FLAKES are produced in a modern American factory on the California coast.

They are free from impurities, sterilized, free from starch—which affords at least 25 per cent additional bulk.

DESHELL STARCHLESS AGAR FLAKES are unusually palatable.

They can be obtained on prescription from any pharmacy.

THE normal, healthy individual is he whose bowels have, as a matter of custom, the impulse to move.

When, as a result of haphazard attention to "Habit Time" the bowel is permitted to become negligent, we have what is undoubtedly the principal cause of the prevalent constipation.

When this condition becomes acute, a cathartic is generally resorted to. This causes irritation of the intestines, the irritation sometimes causes a partial paralysis, the habit of daily movement is interrupted, and another recruit is secured for the army of cathartic users.

To break the cathartic habit and restore the normal function, correct diet and exercise are necessary, and a mechanical lubricant is valuable.

PETROLAGAR provides this mechanical aid. It is a palatable emulsification of mineral oil and agar-agar, which helps educate the bowel to a normal "Habit Time" by providing a soft, easily passed fecal mass, giving perfect lubrication, and diminishing the possibility of leakage.

The agar now being used in PETROLAGAR is an American made agar—a superior product, free from starch, which affords at least 25 per cent additional bulk.

PETROLAGAR has been accepted for New and Non-official Remedies by the Council on Pharmacy and Chemistry of the American Medical Association.

PETROLAGAR is issued as follows: PETROLAGAR (Plain); PETROLAGAR (with Phenolphthalein); PETROLAGAR (Alkaline); and PETROLAGAR (Unsweetened, no sugar).

Send coupon for interesting treatise.

Deshell Laboratories, Inc.

4383 Fruitland Ave.
LOS ANGELES

589 E. Illinois St.
CHICAGO

189 Montague St.
BROOKLYN, N. Y.

Petrolagar

DESHELL
Reg. U. S. Patent Off.

Mail to the Nearest Address

Deshell Laboratories, Inc., Dept. R.

Gentlemen: Please send me, without obligation, a copy of your interesting treatise.

Dr.

Address

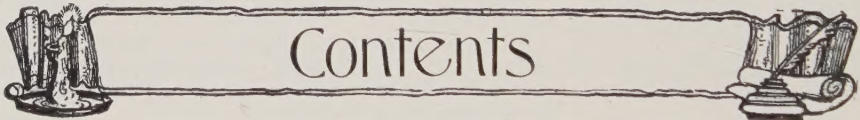


The FIRST TRUST and SAVINGS BANK buys for its own investment carefully selected municipal, railroad and corporation bonds and offers through its Bond Department such securities to its customers. The benefit of thirty years' experience gained in dealing in high-grade investments is always at the service of its clients. Special information and circulars concerning the bonds we offer and recommend will be furnished upon application.

FIRST TRUST and SAVINGS BANK

Northwest corner Dearborn and Monroe Streets

3% Interest is allowed on Savings Accounts



Contents

Original Articles

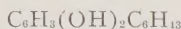
Classification of Goiter from the Standpoint of the General Practitioner—Jas. H. Hutton.....	259
Tuberculosis of the Anus and Rectum—Chas. J. Drueck.....	263
Sea-Sickness—(Its Cause)—E. Radebaugh.....	272
John Addison Fordyce.....	277
French Lick Springs.....	278
Cause and Cure of Cancer.....	279

Editorials

Saving the Babies.....	283
Whiskey Doctors	283
Danger to Our National Defense.....	284
American Reclamation Society.....	284
Behavior Institute Planned.....	285
Earthquake Experience	286
363,063 Cases of Venereal Disease Reported in 1924.....	287
American Association for the Study of Goiter.....	288
Medical Arts Club.....	288

CAPROKOL

(HEXYLRESORCINOL S & D.)



A synthetic chemical possessing about 45 times the germicidal power of Phenol. This remarkable internal urinary antiseptic was recently brought to the attention of the medical profession by Dr. Veader Leonard, Baltimore.

CAPROKOL (Hexylresorcinol S & D.) is indicated in the treatment of infections of the urinary tract.

It is non-toxic in therapeutic doses.

CAPROKOL (Hexylresorcinol S & D.) is supplied only in prescription boxes of 100 Soluble Elastic Capsules, each Capsule containing 0.15 gram CAPROKOL (Hexylresorcinol S & D.) in solution in Olive Oil.

Full particulars upon request

SHARP & DOHME
BALTIMORE

New York Chicago New Orleans St. Louis Atlanta Philadelphia Kansas City San Francisco

Taurocol Tablets

(TOROCOL)

Directly stimulates the liver cells, producing an increased flow of bile rich in cholates, a solvent of cholestrin and a biliary antiseptic for hepatic insufficiency, intestinal putrefaction, habitual constipation and gall stones.

TAUROCOL is a combination of bile salts, extracts of cascara sagrada, phenolphthalein and aromatics.

DOSE: Three tablets on retiring, or one three times daily before meals, reducing dose as bile increases.

Taurocol Compound Tablets

(TOROCOL)

With Digestive Ferments and Nux-Vomica

Formula

Taurocol (Bile Salts)	Gramme	1296
Pepsin 1-3000	"	0324
Pancreatic Ext.	"	0324
Extract Nux-Vomica	"	0081
Aromatics		Q.S.

DOSE: For intestinal indigestion and auto-toxaemia, one to two tablets should be taken two hours after meals; for gastric indigestion, one to two tablets one-half to one hour before meals.

THE PAUL PLESSNER COMPANY
DETROIT, MICH.

LANGUAGES

French, Spanish, German, Italian, English and all other modern languages taught by the Berlitz Conversational Method.

This superior method makes the acquirement of any language a very simple, easy and inexpensive matter. Experienced native teachers. Day and Evening Classes. Private instruction if desired.

Thousands of men and women all over the world endorse the Berlitz Method. A FREE TRIAL Lesson will convince of its merits. Ask for particulars and catalog.

BERLITZ SCHOOL OF LANGUAGES EST. 1878 336 BRANCHES

Auditorium, 56 E. Congress St., Chicago

Harrison 0427

¶ The Correlated Enzymic forces of

Lactopeptine

are **real**—not theoretical—and this accounts for the position of **therapeutic importance** which it has occupied for so many years.

LACTOPEPTINE meets the clinical needs of the practical physician and responds to the laboratory demands of the physiological chemist.

POWDER—ELIXIR—TABLETS

THE
ORIGINAL
MULTIPLE
ENZYME
PRODUCT

Lactopeptine

SAMPLES
ON
REQUEST

**The New York Pharmacal Association
YONKERS, N. Y.**



Vaccination complications yield to this treatment

WHERE the vesicles inflame and deep excavated ulcers result, Antiphlogistine is indicated. Applied hot, it at once increases leucocytosis, because it increases the superficial circulation by detouring the blood through the compensatory venous system.

Next by its hygroscopic property it sets up Osmosis, whereby the fluid exudate of the inflammation is drawn out through the porous membrane of the skin and absorbed by the poultice.

Simultaneously, by endosmotic action, the non-toxic antiseptics of eucalyptus, boric acid and gaultheria in Antiphlogistine are cleansing the affected area.

The bad arm does not manifest until after "the take," so that the antiseptic

action of Antiphlogistine does not annul the efficacy of the vaccine virus.

The use of Antiphlogistine is endorsed by Physicians everywhere as a most valuable aid in all cases of Vaccinal ulceration; Impetigo, Glandular abscess; Septic infection; Erythema; Urticaria, etc.

A reparative action both scientific and rational

The action of Antiphlogistine in removing the exudate of congestion is both scientific and rational.

Apply like a poultice. Heat a sufficient quantity, place in centre of a gauze square, cover the affected part completely with the Antiphlogistine, and bind snugly with bandage.

The Denver Chemical Mfg. Company
New York, U. S. A.

Laboratories: London, Sydney, Berlin, Paris,
Buenos Aires, Barcelona, Montreal, Mexico City



Fill in and use
the coupon

The liquid contents of Antiphlogistine enter the circulation through the physical process of endosmosis. In obedience to the same law, the excess moisture is withdrawn by exosmosis. Thus an Antiphlogistine poultice after application shows center moist. Periphery virtually dry.

The Denver Chemical Mfg. Co.
20 Grand St., New York, N. Y.

Please send me a copy of your
book, "The Medical Manual".

Doctor _____

Street and No. _____

City and State _____

AT YOUR
GROCER'S



WHEN IT RAINS
—IT POURS

ANNOUNCING

MORTON'S IODIZED TABLE SALT

We are pleased to announce to the medical profession that we have perfected, and placed on the market, an Iodized Table Salt. Suitable machinery has been installed which, under the supervision of a certified chemist, assures proper mixing and a reliable product.

This Salt contains two one-hundredths of 1% Potassium Iodide (one part in five thousand) as recommended by Medical Societies and State Boards of Health as a preventive of goiter and thyroid trouble, now prevalent in many localities.

This is the same Morton's Salt that you have used for years, packed in the same damp-tite package with a handy aluminum spout—only with .02% of iodide added for its medicinal value.

MORTON SALT COMPANY
CHICAGO

PRESCRIBED FOR 40 YEARS!

Tongaline

MELLIER

ANTI-RHEUMATIC
ANTI-NEURALGIC

4-oz., 8-oz., 5-pint



50 Tablets—100 Tablets

MELLIER DRUG COMPANY
2112 Locust St., St. Louis, Mo.

Please mail me as samples
4 oz. Tongaline, also
Tongaline and Lithia Tablets

M. D.

Street _____

City _____

State _____

Journeys Beautiful

The Magazine Every Traveler Needs

To travel lovers there is nothing quite so fascinating next to a trip itself, as well-written, well-illustrated travel articles.

"Journeys Beautiful," is not only filled with interesting fascinating articles; it carries regularly articles of real help and places to go, how to get there and when to go. It covers the famous resorts of the world; tells what you want to know about them. It covers every method of travel—Railway, Airplane, Motor, Steamship—in an interesting manner.

Every woman will like its fashion articles—what to wear on the trip and after you get there, written and illustrated by style authorities.

SPECIAL OFFER:

The yearly subscription price of "Journeys Beautiful" is \$4.00 a year. We are making a SPECIAL OFFER of \$1.00 for five months. Fill out the coupon and mail today.

Nomad Publishing Company, Inc.
150 Lafayette Street, NEW YORK CITY

Nomad Publishing Co., Inc., 150 Lafayette St., New York, N. Y.
I enclose \$1.00 which entitles me to your special subscription offer of \$1.00 for five months to "Journeys Beautiful." Please send the magazine at once.
Name.....
Street.....
Town.....
State.....
C.M.R.

D. B. QUINLAN—Automobile Ambulance



To all parts of the
city and suburbs

In charge of ex-
perienced men.

3115 State Street

VICTORY 4519

For
Infants
and
Growing
Children



THE ORIGINAL—AVOID IMITATIONS

Nourishing
Food-Drink
for
Nursing
Mothers

Hotel Westminster

..IN THE..

GREAT NORTH COUNTRY

..AND THE..

“1000 ISLANDS”

Health, Rest and Recreation, Delightful Surroundings.
Unlimited Land and Water Attractions.
A Thousand Acres in Our Grounds.

Write H. F. INGLEHART, Prop., Alexandria Bay, N. Y.

Rest

"The murmur of a waterfall
 A mile away,
 The rustle when a robin lights
 Upon a spray,
 The lapping of a lowland stream
 On dipping boughs,
 The sounds of grazing from a herd
 Of gentle cows.
 The echo from a wooded hill
 Of cuckoo's call,
 The quiver through the meadow grass
 At evening fall,—
 Too subtle are these harmonies
 For pen and rule,
 Such music is not understood
 By any school;
 But when the brain is overwrought,
 It hath a spell,
 Beyond all human skill and power
 To make it well."

—Anon.

Michell Farm

for Nervous, and Mild Mental Diseases
 REST, RECREATION, SPECIAL CARE AND TREATMENT

On Galena Road in the Illinois River Valley



"A Bit of California on the Illini."

Address George W. Michell, M.D., Medical Director, MICHELL FARM.
 Peoria, Illinois

BEAUTIFULLY ILLUSTRATED BOOKLET ON REQUEST

16 Miles North of
Chicago

Write for
Booklet

Phone Winnetka 211



DR. EUGENE CHANEY
Medical Director

DR. GEORGINA A. GROTHAN
Asst. Physician

DR. ANNE H. M. SHARPE
Ass't. Physician

McDONALD REST CURE

2720 Prairie Ave., Chicago, Ill.

A private home for Convalescents and for the care of those needing rest and quiet, or suffering from nervous diseases, anemia, etc.

Physicians have entire charge of their patients.

Phone Coliseum 7837

ALMENA PARKER McDONALD, Superintendent

1000 Island House

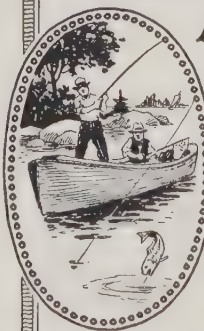
Alexandria Bay, N.Y.

VENICE OF AMERICA

THE LARGEST AND BEST CONDUCTED
HOTEL IN THE THOUSAND ISLANDS

A RESORT DIFFERENT THAN OTHERS
AND NOTED FOR ITS HIGH CLASS
CLIENTELE

FOR MANY YEARS OWNERSHIP
MANAGEMENT OF
WILLIAM H. WARBURTON
ILLUSTRATED BOOK WITH ROAD MAPS FREE



MOTORBOATING
GOLF
TENNIS
FISHING



NEW
18 HOLE
GOLF
COURSE



Kenilworth Sanitarium

(Established 1905)
KENILWORTH, ILLINOIS

C. & N. W. Railway, 6 miles North of
Chicago

Built and equipped for the treatment of nervous and mental diseases. Approved diagnostic and therapeutic methods. An adequate night nursing service maintained. Sound-proofed rooms with forced ventilation. Elegant appointments. Bath rooms en suite, steam heating, electric lighting, electric elevator.

Resident Medical Staff:

Sherman Brown, M. D.

Mable Hoiland, M. D.

Sanger Brown, M. D.

Consultation by appointment only.

All correspondence should be addressed to
Kenilworth Sanitarium Kenilworth, Ill.



THE WILGUS SANITARIUM ROCKFORD, ILL.

For Mild Mental and Nervous Diseases

Under the management of DR. SIDNEY D. WILGUS, formerly superintendent Elgin and Kankakee State Hospitals. Address DR. SIDNEY D. WILGUS, Box 304, Rockford, Ill. Long distance Bell phone 3767. Chicago Office, 25 E. Washington St.

Telephone Central 2110
Thursday Mornings Only
By Appointment

Oconomowoc Health Resort

OCONOMOWOC, WIS.

Building New—Absolutely Fireproof

Built and Equipped for treating
NERVOUS AND MILD MENTAL DISEASES

THREE HOURS FROM CHICAGO ON C. M. & S. P. RY.

Trains Met at Oconomowoc on request.

LOCATION UNSURPASSED.
READILY ACCESSIBLE.

ARTHUR W. ROGERS, B. L., M. D.

RESIDENT PHYSICIAN IN CHARGE



Waukesha Springs Sanitarium

For the Care and Treatment of
Nervous Diseases

Building Absolutely Fireproof

Byron M. Caples, M. D., Medical Director.

Floyd W. Alpin, M. D.

L. H. Prince, M. D.

Waukesha, Wis.

for
Simple Goiter

nothing can excel a combination of thyroid, ferrous iodide, and nuclein. These ingredients, scientifically proportioned, are contained in

Iodized Thyroid Co.
 (Harrower)

for
Exophthalmic Goiter

a combination of pancreas, adrenal, and pituitary (total) frequently will give results when all other measures have failed. These three ingredients are contained in

Pancreas Co.
 (Harrower)

THE HARROWER LABORATORY, Inc.
 Glendale, California

The Caswell Gypsy



To those who instinctively respond to quality, the beauty, design and perfection in mechanism of the Caswell Gypsy make an instant appeal. For the first time all needed elements have been combined to make the ideal portable phonograph beautiful in finish and workmanship, possessing hitherto unknown volume and quality of tone values together with the ruggedness necessary for portable use.

This is an all-purpose Phonograph, equally as good in the apartment as out on the week-end camping trip—just the thing to while away many happy hours. Plays two selections with one winding and carries eighteen records securely. See it at your music dealer or order direct. We will send it post-paid on receipt of your check or money order.

Price - - - - \$25.00

See it at your music dealer or write us
 direct giving his name

CASWELL MANUFACTURING CO.
 PORTABLE PHONOGRAPHS OF DISTINCTION
 ST. PAUL AVE., AT 10TH STREET MILWAUKEE, WIS.

The Chicago Medical Recorder

Official Journal

of

The American Association for the Study of Goiter

Vol. XLVII

AUGUST, 1925

No. 5

ORIGINAL ARTICLES

Classification of Goiter from the Standpoint of the General Practitioner

DR. JAMES H. HUTTON, Chicago

To many of us the most confusing thing about the goiter problem is its terminology. There are almost as many names and classifications as there are writers on the subject. Every author seems to feel that he must offer a new classification or modify some of the existing ones. This multiplicity serves only to emphasize our ignorance of the real etiology and pathology back of various clinical pictures and to confuse all but the very elect. Some terms are thought to indicate the histology or pathology underlying various clinical manifestations, others indicate the age incidence of the goiter or its geographic distribution, while still others refer to its anatomic location.

Below is an arrangement of terms and classifications occurring in the literature at present:

ARRANGEMENT OF TERMS

Simple non-toxic:

(a) Diffuse Colloid Goiter (also called by various writers as follows):

1. Simple goiter
2. Endemic goiter
3. Adolescent
4. Adolescent vascular
5. Adolescent colloid
6. Non-toxic
7. Goiter with apparent normal secretory activity.

(b) Adenomatous goiter without hyperthyroidism (also referred to as):

1. Endemic
2. Simple.
3. Non-toxic
4. Nodular
5. Goiter with apparently normal secretory activity.

Toxic:

(a) Adenomatous goiter with hyperthyroidism (also called):

1. Goiter with increased secretory activity
2. Toxic (basedowian syndrom)
3. Atypical hyperthyroidism (basedowoid syndrom)
4. Pseudo-Graves's disease
5. Formes frustes of Grave's disease
6. Thyro toxic
7. Secondarily toxic.

(b) Exophthalmic goiter (also called):

1. Grave's disease
2. Parry's disease
3. Basedow's disease
4. Toxic

Diffuse colloid goiter

Adenomatous goiter without hyperthyroidism

Adenomatous goiter with hyperthyroidism

Exophthalmic goiter

Myxedema

Gretinism

Childhood myxedema

Thyroiditis

Malignant disease of the thyroid.

Non-toxic parenchymatous goiter

Hypothyroid goiter

Non-toxic nodular goiter

colloid goiter

fibrous goiter

cystic goiter

intrathoracic goiter

Congenital goiter

Accessory non-toxic goiter

Thyroiditis and strumitis

Malignant goiter

Exophthalmic goiter

Simple, slight over-activity

Goiter clinically non-toxic

cystic

colloid

adenomatous

Toxic goiters—this includes all toxic goiters except exophthalmic goiters.

Colloid

Adenoma

with hyperthyroidism

without hyperthyroidism

Exophthalmic goiter

Tuberculosis, syphilis, thyroiditis, malignancy.

Goiters with approximately normal secretory activity or hypo.

(a) simple and endemic

(b) goiters with adenomas

(c) colloid goiter

Goiters with increased secretory activity

(a) adolescent goiter

(b) goiter with adenoma

(c) goiter with Grave's disease

Goiters with degeneration

(a) malignant goiters

(b) goiters with cystic, hemorrhagic, fibroid, or hyaline degeneration.

Physiological hypertrophy, including the goiter of puberty, pregnancy and menopause

Endemic goiter—

a strictly iodine deficiency disease

Non-toxic goiter—

persistent physiological,

colloid,

fetal adenomata,

cystic,

neoplasm

Toxic goiter—

any of the preceding non-toxic group which are toxic

Exophthalmic goiter—

a clinical entity; a disease which runs a typical course with remissions.

When the profession differs as to the nomenclature or treatment of a condition it is evidence that the profession is ignorant of many phases of the condition under discussion. Goiter exemplifies the

truth of this statement. The multiplicity of terms and classifications serves to emphasize our ignorance and to still further confuse the average man. After all, most of us are just average doctors and the problems of one are not essentially different from those of others.

We are not agreed even on the definition of the term. Webster's New International Dictionary defines it as follows:

"GOITER: An enlargement of the thyroid gland often associated with cretinism and myxedema." How many of us have this conception of it?

Exophthalmic goiter is quite commonly present without goiter. A medical student recently asked, "Can a patient have exophthalmic goiter without having a goiter?" When I told him such was possible he queried, "Why the name?" Why indeed! A surgeon doing a very large amount of goiter work feels that the term thyro-toxicosis should be applied to Grave's disease. Other men of large experience apply it to adenoma with hyperthyroidism. There is more logic perhaps on the side of the surgeon but why the term at all so long as we are uncertain of the clinical picture it should designate?

The dictionary defines endemic disease as one which is constantly present to a greater or less degree in any place. Many men speak of endemic goiter as if endemic described a certain type of goiter. While diffuse colloid goiter may be more common than any other in goiter zones, yet adenomatous goiters are constantly present in the same territory, albeit in smaller numbers. Why not drop from the literature endemic as an adjective applied to goiter? It is of no value and serves only to add to the confusion of terms with which we struggle.

An adolescent patient may have a goiter. In fact, many goiter patients are adolescents, but is the goiter adolescent?

Quoting Webster again: *Adolescent*—"Advancing from childhood to maturity." Can either of these terms be well applied to any goiter? An adolescent patient may have a colloid goiter, Grave's disease, an adenoma without hyperthyroidism, and possibly occasionally adenoma with hyperthyroidism. What good is the term in discussing goiter?

There are a few things on which all are agreed. All goiters are divided into toxic and non-toxic. In the non-toxic group we place those not accompanied by an increase in the basal metabolic rate or other evidences of increased thyroid activity, or, at least, by only slight or transient evidences of such increase.

In the toxic class we group those goiters showing an increase of thyroid activity as manifested by signs of hyperthyroidism leading probably to an abnormal quantity or quality of thyroxin—if one wishes to designate the thyroid secretion by that term. Many writers feel that an adenoma with hyperthyroidism is accompanied by an increase in the *amount* of *normal* thyroid secretion in the body. While many believe that exophthalmic goiter owes its symptoms to the abnormal quality of the thyroid secretion, Plummer believes the thyroxin molecule is incomplete as to its iodine content and is poisonous because of this deficiency.

In a third group we can place the various degenerative conditions, inflammations, and malignancies.

We come to thorough disagreement when we begin to classify the various kinds of toxic and non-toxic goiters. Much of this argument is mere splitting of hairs and serves only to emphasize our ignorance of the cause of these various kind of goiters.

When a goiter patient comes into the office the doctor should decide first whether the goiter is toxic or otherwise. and second, whether there is an adenoma

present. If he is able to make these decisions early there is little danger of his getting on the wrong track with his treatment.

The following simple classification should be sufficient for the average clinician. I believe it was originally suggested by Plummer. That it is open to criticism is freely admitted but it is simple and if mastered will enable the clinician to treat his patient along safe lines, avoiding iodine in all but the colloid and exophthalmic varieties.

Colloid

Adenoma

with hyperthyroidism

without hyperthyroidism

Exophthalmic goiter

Tuberculosis, syphilis, thyroiditis, malignancy.

Some may feel that the decision as to whether an adenoma is present is a matter of academic interest only. To those I should like to point out a few things in the life history of adenomatous goiter and its response to treatment.

An adenoma may and usually does develop during adolescence. The danger of its developing hyperthyroid symptoms becomes increasingly greater with advancing age. Most adenomata with hyperthyroidism have been present many years, an average of about 17, before the patient consults the surgeon.

Colloid goiters develop about the same period of life. They rarely, if ever, develop signs of hyperthyroidism.

Iodine properly administered will prevent or cure most colloid goiters. Iodine is practically a poison to an adenomatous goiter and will convert a non-toxic adenoma into an adenoma with hyperthyroidism more promptly than any other measure. Iodine should never be given to a patient with an adenomatous goiter. Even exophthalmic goiter is benefited by iodine, at least temporarily, but iodine is always and at all times contra-indicated in adenomata.

Tables showing the chief differences between Grave's disease and adenoma with hyperthyroidism, and diffuse colloid goiter and adenoma without hyperthyroidism follow.

DIFFUSE COLLOID GOITER

Occurs during adolescence, menstrual periods and pregnancy.

Endemic.

Enlargement smooth and uniform.

Symptoms due to pressure or hypothyroidism.

No tendency to give rise to hyperthyroidism.

Prevented or cured by iodine.

Surgery never indicated.

ADENOMA WITHOUT HYPERTHYROIDISM

Occurs during adolescence, menstrual periods and pregnancy.

Endemic.

Enlargement nodular or asymmetric.

Symptoms due to pressure or hypothyroidism.

Tendency to develop hyperthyroidism after the age of 30.

Frequently made worse by iodine which often initiates hyperthyroid symptoms.

Surgery frequently indicated either as a cure or as a prophylactic against hyperthyroidism.

ADENOMA WITH HYPERTHYROIDISM

Goiter always present.

Asymmetrical enlargement of thyroid or nodules in the thyroid.

Onset insidious. Course variable, extending over many years. Frequently a history of repeated attacks of hyperthyroidism during this period.

Tachycardia.

Nervousness.

Tremor irregular and less marked.

Loss of weight and strength.

Increased appetite.

Thrill and bruit usually absent.

Superior thyroid arteries not usually palpable.

Exophthalmos almost always absent.

Tendency to hypertension; pulse pressure is normal.

Gastro-intestinal crises infrequent.

TREATMENT

Surgical.

Removal of foci of infection.

Removal of the adenoma if a single large one is present.

Subtotal thyroidectomy.

Medical management frequently not satisfactory.

EXOPHTHALMIC GOITER

Goiter many times absent.

Symmetrical enlargement of thyroid when a goiter is present.

Onset acute. Course definite, continuous and characterized by periods of exacerbations and remissions.

Tachycardia.

Nervousness.

Definite fine tremor.

Loss of weight and strength.

Increased appetite.

Thrill and bruit usually present.

Superior thyroid arteries frequently palpable.

Exophthalmos usually present.

No tendency to hypertension; pulse pressure low.

Gastro-intestinal crises frequent.

TREATMENT

Lugol's solution or some other form of iodine by mouth.

Removal of foci of infection.

X-Ray or radium.

Ligation of thyroid arteries.

Subtotal thyroidectomy.

Medical management frequently not satisfactory.

There should be a closed season on goiter terms and classifications, during which period of eleven and one-half months out of each year it should be a finable offense for a new term or classification to be suggested and any ambitious medical man wishing to enlighten the world on this subject should be compelled first to commit to memory the existing terms and classifications and then look up in the dictionary the meaning of the various terms so used.

Tuberculosis of the Anus and Rectum

CHARLES J. DRUECK, M.D.

Chicago

Tuberculosis is one of the terrible and destructive infections of the lower intestinal tract which may appear in a variety of clinical pictures. It may be primary or secondary. Primary tuberculosis of the anus or rectum (appearing as the only evidence of phthisis in the individual) is very rare. Secondary tuberculosis, on the contrary, is quite frequently seen as a result of swallowing of sputum by the patient who is suffering with pulmonary tuberculosis. In health the hydrochloric acid of the stomach will destroy the tubercle bacilli

but in debilitated individuals where the gastric secretions are of weak quality the bacilli pass into the intestines unimpaired. Infection may also occur through the ingestion of tuberculous food (milk from tuberculous cows) or occasionally by scratching with an infected finger nail.

Anal Tuberculosis: Tuberculosis of the skin about the anus may appear as miliary, ulcerative, lupoid or verrucous lesions. Miliary tuberculosis about the anus is very rare and occurs as a complication of tuberculosis of

other organs. It develops as millet seed sized nodules grouped in crescents or circles which begin in the hair follicles, sebaceous or sudoriparous glands of the skin. Later as the infiltration enlarges necroses of the superimposed skin occurs and small cup-shaped ulcers with ragged borders appear. There is a slight discharge of seropus, but no bleeding. These ulcers usually continue as small individual necroses but sometimes they coalesce into extensive wounds. Their blood supply is poor and they do not bleed on handling.

Ulcerative Anal Tuberculosis: Tuberculous ulcers at the anus begin insidiously. Sometimes there is a history of a known injury, although often this injury was so slight as to be forgotten until brought to mind by the examiner's questions. For example, a diarrhea, horseback or bicycle riding or a thrombotic hemorrhoid has been followed by an area of induration at the anal margin which persists for a long time and finally ulcerates. The necrosis may begin on the external skin or within the anal canal. As the ulcer spreads it usually involves both the perianal skin and the anal mucous membrane. Tuberculous ulceration in the anal mucosa does not confine itself to a sulcus as does a fissure but widens out in all directions. The borders of these ulcers are clean cut, undermined and pale with a ring of raised induration all about the ulcer. The base of the ulcer is irregular and gray in color and does not bleed easily. On the surface of the ulcer may be seen small yellow tubercles. There is not much pain with the passage of feces or on the manipulation of examination. This is quite in contrast to the sensitiveness of the irritable ulcer. This freedom from pain distinguishes the tuberculous ulcer from fissure, chancre, mucous patch and rodent ulcer. The

discharge is scant and thin and but rarely is tinged with blood.

The clinical course of these ulcers varies greatly. Some extend slowly, while others spread rapidly and destroy all structures. Unlike syphilitic ulcerations, there is no healing at one spot while ulceration progresses at another, but rather the tubercular ulcer spreads continuously in all directions. The ulcer is not usually fatal but it contributes to the general breakdown of the patient.

Case 2:—S. M., aged 43, occupation a retail grocer clerk, nativity Irish-American. He developed pulmonary tuberculosis and was under institutional care almost continuously thereafter. About a year later he suffered with hemorrhoids which prolapsed for several days and were finally replaced by a physician. The patient applied an ice bag to the anus almost continuously thereafter for the next four weeks, and about that time he developed a marginal abscess. The abscess was opened, but did not heal and has continuously discharged a yellowish excretion since that time. There is no pain at stool or on walking and but little pain after the manipulations of dressing the wound.

On inspection we found an ulcer at the muco-cutaneous junction in the posterior quadrant of the anus and to the right of the median line. It was one-half inch wide by one inch long and extended up into the anus and out on the skin. Its edges were irregular and rolled in, its base was dry and glistening, not bleeding, and was without any points of granulation. (Fig. 1.)

Lupus was long considered a syphilitic manifestation, but is now known to be tubercular. It is slow in spreading, but in its aggravated type is terribly destructive of tissue. Fortunately, it is a very rare disease at the anus. It begins as a pin head sized, brownish red nodule in the corium of the skin, near

the muco-cutaneous junction at the anus or vulva, which for a long while is not raised above the surface. Examined under glass pressure the nodule grows pale but does not disappear. New nodules gradually appear but it may be years before a sizable patch is present. When the nodule has reached the size of a pea it will be noticeably raised and exhibit a peculiar semi-translucency which has been compared to apple jelly. If ulceration occurs the area is irregular shaped, rather shallow, clear cut, with thin edges and having an indurated base and discharging a cheesy pus which dries into yellow or greenish crusts (*lupus exedens*). Although the ulceration progresses slowly it may ultimately involve large areas. Cicatrization appears in some ulcers at times but it soon breaks down. The uneven contractile scars often resemble those which follow burns. New lupus nodules may appear in portions of the cicatricial tissue which were apparently free from active disease. The degenerated lupus areas are partly absorbed and replaced by a fibrous connective tissue infiltration beneath the ulcer which seems to prevent its deepening but does not interfere with lateral spreading by enlarging of the individual ulcers and also large ones.

Differential Diagnosis: Lupus must be differentiated from the gummatous lesions of syphilis. This is usually easy but may occasion considerable difficulty. The nodules of lupus are usually less elevated and more deeply imbedded in the skin than those of syphilis, particularly in the early stages, and more yellowish and translucent. There is usually but a single patch of lupus, while there are frequently two or more of syphilis; the former are without definite arrangement, while the patches of syphilis are annular or crescentic in shape. The lupus patch progresses

slowly, months or even years, elapsing before it reaches any considerable size, while the syphilitic patch grows comparatively rapidly and ulcerates early. The scar of lupus is often rough, uneven and irregular in outline, and frequently shows nodules in the center, while the scars of syphilis are smooth, round, soft and pliable, and uneven, contain nodules except at the border. Lupus begins almost invariably in childhood, while syphilis is in most instances an affection of adult life. A Wassermann reaction should always be sought and in doubtful cases a few doses of Salvarsan should be given.



Fig. 1.—Tubercular ulcer at the anus. Note how the ulcer extends out onto the skin and burrows widely. Case C 2.

Lupus must also be differentiated from epithelioma, but the yellowish red nodules of the former are not like the pink nodules of cancer. Lupus occurs in patches, while epithelioma is usually a single nodule. The ulcer of lupus is shallow with thin edges and extends very slowly, is soft and unsensitive and covered with granulations, that of the epithelioma are frequently quite deep with a pearly white indurated, uneven and glazed base and its edges are everted and bead like. Lupus is a disease of early life, while epithelioma is seldom seen before the age of fifty years. The secretion of cancer is scant and fetid

while the discharge of lupus is profuse and odorless.

Occasionally when there is considerable scaling of the lupus patch it may be mistaken for inveterate scaly eczema but the scaling and itching of the latter are much more severe while the absence of characteristic nodule, and a history of occasional oozing are symptoms so characteristic of eczema that the two diseases are not likely to be mistaken for each other.

Treatment of Tuberculosis at the Anus: Prophylaxis is all important. The tuberculous patient should be thoroughly and repeatedly impressed that it is through swallowing the sputum that the bowels become infected. Various procedures have been carried out hoping to produce immunity but the use of tuberculin and also the transplanting of tuberculous lymph nodes into normal animals have both been unsatisfactory. When infection and ulceration have occurred, medication by mouth is not beneficial. These patients have poor digestion and unpalatable drugs by mouth further upset the appetite. They should have an abundance of easily digested, readily assimilable food, plenty of milk, cream, fresh eggs, with butter and other foods of a similar character. Everything should be done to increase their nutrition, so that their powers of resistance to infection may be brought to the highest possible point. Although not directly influencing the disease, cod liver oil, iron, arsenic and quinine are of use in helping to improve the general condition.

Local Treatment: Systemic treatment must be regarded only as an adjuvant to the local treatment. Since we possess no remedy which when applied to the lesion will destroy the tubercle bacillus without at the same time injuring the surrounding tissues, the aim of all local

treatment is to remove the disease or to destroy it in situ.

The various forms of local treatment may be considered under three divisions, first, surgical removal of the diseased tissue; second, destruction in situ by chemical caustics or the cautery, and third, exposure of the area to radiant energy such as light, x-ray, radium.

Treatment of Anal Ulcerative Tuberculosis: If the patient's initial tubercular lesion is of moderate extent or is not active the ulcer may be thoroughly curetted with the paquelin cautery, removing all of the necrotic tissues of the edges and base of the ulcer. I prefer the cautery to the knife as by that means the lymphatics are sealed beyond and dissemination is prevented. Thus we improve the patient's resistance. Following the cauterization the anus should be exposed to the sunlight and air for several hours each day. The patient can soon be taught how to spread the nates and expose the anus. If any part of the body which is normally covered shall be thus suddenly exposed directly to the sun's action blistering and painful tanning occurs. Therefore during the first few days the nates should be covered with a cotton sheet, later this is replaced with three layers of cheese cloth, one layer of which is removed after a few days, the second a few days later, but at least one layer of cheese cloth should always cover the parts as a screen against the action of the sun. It is remarkable how quickly relief and healing take place. When a patient is weak and we think not equal to the cauterization even under local anesthetic, surprising results may be obtained by exposure to the sun.

Treatment of Lupus at the Anus: Satisfactory results are obtained by phototherapy (Finsen light), concentrating the light rays on a small area of skin for about an hour. The next day a

small blister appears and this is dressed with soothing ointment. After all irritation has subsided another exposure is given. The treatment is very tedious. The roentgen-ray produces good results and is sometimes more convenient. Its action is pushed to the extent of producing a burn which is then protected with a soothing dressing. The scars following either of these plans of treatment are much less objectionable than those of any other plan of procedure.

Zinc cataphoresis has been employed very satisfactorily in the treatment of lupus and epithelioma. While there is no doubt of the efficacy of the roentgen ray for the relief of these growths, the process takes much time and is not devoid of danger. In the use of zinc cataphoresis, however, a perfect result may be had without danger or pain, oftentimes in a single treatment.

The ulcer is made clean with hydrogen peroxide or boric acid solution and a pledget of cotton saturated with 10 per cent solution of cocaine is wound around a block tin electrode of suitable shape and attached to the anode of the constant current. The cathode is the usual pad of absorbent cotton so placed as not to be under the control of the patient. The anode upon which the cocaine has been placed is now applied to the ulcer and a current strength of from 5 to 10 Ma. is maintained for about five minutes, or until complete anesthesia of the part is apparent.

The cotton is now squeezed with the finger until it is as dry as possible and dipped into a saturated solution of zinc sulphate and again applied to the sore, using a current strength within the limits of tolerance of the patient, which is usually about 10 Ma, until the ulcer has assumed a decidedly blanched appearance. Every portion of the sore must be treated until it turns white. No particular care need be taken to pre-

vent contact with the sound tissue immediately surrounding the ulcer. It will not be affected.

In a day or two the surface of the ulcer turns black, and about the fourth day the crust can be removed, leaving a smooth healthy cicatrix.

The case should now be watched for a few weeks for any small nodules that may appear in the margin of the sore. If any appear, they should be given another treatment.

Tuberculosis Within the Rectum: Tuberculosis within the bowel occurs rarely in the miliary form, but more commonly as ulcerative and occasionally as hypertrophic changes.

Miliary nodular tuberculosis of the rectum usually is secondary to tuberculosis of the genital organs, more particularly the prostate, and begins as deposits which feel like birdshot beneath the mucous membrane. The mucosa is pale and anemic, except that immediately about the nodule there is a ring of congestion. This stage may continue for a long time, but at any moment the little nodules may become yellow, caseate and break down into little cup-like ulcers, which later coalesce to form large ulcers, or several small ulcers may be connected by burrowing underneath the mucous membrane.

Ulcerative tuberculosis is the more common expression of this disease in the bowel and is usually secondary to pulmonary tuberculosis or associated with nodular manifestations in the bowel. Infection begins in the solitary follicles and in Peyer's patches, but spreads into large, irregular shaped ulcers which follow the course of the blood vessels. Thus, in the rectum they spread in all directions, while in the sigmoid they tend to encircle the bowel.

The whole mucosa of the bowel is pale and anemic, except close around the tubercle, where a ring of congestion

appears. Later the tubercle gradually fades to a yellow color as caseation advances and finally breaks down into an ulcer with a ragged worm eaten base, surrounded by an infiltrated and indurated base which is sometimes undermined. In the necrotic base of the ulcer are seen little yellow tubercles. These ulcers may extend all around the bowel and have little sinuses running beneath the mucosa from one ulcer to another. If the ulcers are close together the intervening bridge of tissue may slough away and thus a large irregular ulcer appears, perhaps extending entirely around the bowel.

This necrosis may be confined to the mucosa and submucosa or it may extend to the muscular and serous coats, but it rarely causes perforation. During the sloughing of tissue the various other bacteria of the colon add to the systemic poisoning. Beneath the ulceration is a deposit of fibrous connective tissue.

The fibrous hypertrophic type of tuberculosis is manifested by a marked increase of fibrous connective tissue, the tubercles are discrete and relatively sparse. The large amount of fibrous tissue indicates a marked resistance on the part of the patient. It is the terminal stage of healing tuberculosis colitis and pericolitis. This type gives practically the same roentgen picture as the ulcerative.

Symptoms: The local symptoms of tuberculosis ulceration of the sigmoid or rectum are lumbar or sacral ache and rectal tenesmus, accompanied with diarrheal evacuations of pus, blood and mucus. The earliest symptoms of the colo-proctitis and showing the disturbed digestion in general, is the voiding of gas and mucus and an associated irregular colicky pain and abdominal distention. As soon as the tubercles break



Fig. 2.—Tuberculosis of the Sigmoid.

down, and erosion begins, blood is mixed with the mucus and discharges and severe hemorrhage sometimes occur when the ulceration erodes a blood vessel. If the bleeding is oozing in character it may be persistent and considerable blood be accumulated and retained within the rectum. The stools are diarrheal, dark in color from the added blood and of a foul, gangrenous odor. Sometimes the stools are partly formed and tar like from the mixed blood.

Tenderness may not be present unless the peritoneum above or the sphincter region below is involved.

Stenosis and even obstruction may occur, although death intervenes usually on account of failure of nutrition. The diarrhea is slight at first but increases as the ulceration spreads, until thirty or forty evacuations occur daily. Bleeding is not profuse, but as the oozing is persistent the blood may accumulate and be retained in the rectum. Thus

when voided it may be fresh, tar-like, or mixed with the feces.

Diagnosis: Tuberculosis ulceration of the bowel should be looked for in every patient when diarrhea occurs that cannot be accounted for by over-eating or improper food, or by any other dietetic errors, which does not promptly yield to treatment. A careful proctoscopic examination may fail to find the ulcers but when present in the sigmoid or rectum they are very typical and easily recognized. Tubercle bacilli in scrapings from the ulcer are strong evidence of the nature of the trouble, although the possibility of accidental deposit of the bacilli on a non-tuberculous ulcer must be remembered. The clinical picture is, however, somewhat characteristic: (1) The presence of tuberculosis elsewhere, as in the lungs, lymphatics, or the genito-urinary system; (2) Ulcers which follow the course of the blood vessels and in the rectum spread out irregularly in every direction; (3) Diarrhea, discharge of mucus, blood and pus with rectal tenesmus; (4) General emaciation of the patient with great loss of body fat. This may be expressed by the consumption of the perirectal fat and a shrunken or funnel shaped anus.

Tuberculous lesions of the intestine are frequently found at post-mortem examination (from 60 to 90 per cent) whenever a tuberculous process has existed in the lungs for any length of time. The inevitable lodgment of some of the tubercle bacilli which pass almost continuously along the gastro-intestinal tract of the tuberculous patient is to be expected. Clinical recognition has, however, lagged far behind the reasonable expectancy that postmortem experience seemed to warrant, perhaps because we concentrate our clinical attention so firmly on the pulmonary involvement that we disregard the rest of the body,

or explain away possible intestinal symptoms on the basis of the general intoxication; more likely, though, because the great majority of the intestinal lesions, especially if located above the ileocecal junction, give rise to only an indefinite symptomatology. •

Even with our attention focused on the abdomen as a result of suggestive symptoms, the means of certain diagnosis are still lacking. The mere finding of tubercle bacilli in the stool is of no value, for in virtually every open pulmonary case we get the same result on careful examination. This uncertainty is the more unfortunate because medical or surgical aid, if it is to be of value, depends entirely on the early recognition of the disease extension. When once the stage of distinct abdominal tenderness, of severe pain and of intermitten diarrhea has been reached, our corrective measures are virtually useless.

The early symptoms of ulcerative tuberculous colitis are not sufficiently characteristic to make possible a definite clinical diagnosis, even in the presence of pulmonary tuberculosis. If any benefit is to come from treatment it is imperative that the disease be recognized early, and for this recognition the roentgen ray furnishes the most help as yet available.

Differential Diagnosis: The differentiation of a tubercular ulcer from that due to some other irritation is very essential. Theoretically this should be easy, but practically it is much more difficult, because often the classical symptoms are lacking or confused. It is probable that tubercular ulceration of the terminal bowel (sigmoid and rectum) is much less frequent than is generally supposed. When a patient with rectal ulceration becomes emaciated the conclusion frequently is that the process is tubercular. Any ulceration in the

lower colon produces dysentery which contributes to imperfect nutrition and the clinical picture of tuberculosis, but the character of the ulceration differs with each causative factor. Rectal ulcers of any type are intractable, and are therefore often believed to be tubercular. Amebic ulcers may be mistaken for tubercular lesions, but the amebic sufferer passes through many periods of symptomatic cure followed by sharp relapses, quite in contrast to the story of tuberculosis, which is progressively worse. In amebic ulceration there is little variation of temperature and the pulse rate is increased only as exhaustion becomes pronounced. In tubercular ulceration elevation of temperature and acceleration of the pulse rate are always present.

Cancer by the time it reaches the ulcerative stage fills the lumen of the gut and causes obstructive symptoms.

A syphilitic ulcer has a punched out appearance with raised edges, while the tubercular ulcer is irregular in outline and has an uneven base (a worm-eaten appearance).

Hyperplastic Tuberculosis: This type of tuberculosis is characterized by the formation of a dense hypertrophy instead of caseation and necrosis, and may be confused with syphilis or scirrhus cancer of the bowel. The existence of tuberculosis elsewhere in the patient should put the physician on his guard.

Symptoms: A proliferating stenosis, with great thickening of the wall of the bowel and including the peritoneum, develops instead of the ulcerating cavities found in the ulcerative tuberculosis of the bowel. These lesions are found in the cecum and appendix, as well as in the sigmoid and rectum. The patient has the same diarrhea, tenesmus, sacral pain and rapid loss of weight as in the ulcerative type of tuberculosis, although as the stenosis develops there is a grad-

ually increasing constipation with the passage of mucus and later also pus and blood.

This hyperplastic form of tuberculosis is frequently mistaken for cancer or diverticulitis, and is only differentiated by microscopic examination. Lartigan (1) claims that it is purely a local tuberculosis, as the lungs and other organs are rarely involved. Lynch has also found this type of tuberculosis as a primary lesion in the sigmoid and rectum.

Treatment: What has been said of the prophylactic treatment of tuberculosis at the anus will apply similarly here.

The same principles govern the active treatment of tuberculosis of the pelvic colon as apply to tuberculosis elsewhere in the body, that is, living in the open air as much as possible, particularly at night, very little physical work or mental strain, and a highly nutritious diet.

The internal administration of iodine gives some surprising results when pushed to the limit of tolerance. It does not accumulate in the body but is rapidly eliminated. It seems to be both microbicidal and antitoxic besides stimulating the production of leucocytes and increasing the functions of the ductless glands. A freshly prepared 10 per cent tincture of iodine, without the addition of iodide of potash is used.

To test the susceptibility of the patient small doses are used at first, 5 drops per dose are given three times daily for 5 days and the dose increased 5 drops every 5 days until 50 drops are taken at each dose. This dosage is maintained for 5 days and then the course is repeated again beginning at 5 drops. I prefer a half cup of cold milk as a vehicle, although in some patients wine may be used. The iodine is carefully dropped into the milk one drop at

a time while the milk is being constantly stirred. Stirring is continued for two or three minutes after the iodine is added. As the iodine is added the milk is discolored brown but it soon returns to its normal color and is now put on ice until needed. One dose should always be made in advance that the chemical reaction between casein and the iodine may occur before the milk is taken. During this time the color and odor disappear and the milk is rendered more acceptable to the stomach. The dose should be taken at the beginning of the meal. If any symptoms of intolerance are shown, smaller doses must be used, or the treatment is suspended for a time, and this must be done in the event of the pyrexial attacks.

There repeatedly appears in the medical press mention of the use of calcium in the tuberculous. Beasley (2) gives much detail of the nature of the solution used, frequency of injections and dosage employed. Fishberg (3) reports the results obtained in seven cases of intestinal tuberculosis by the intravenous injection of a 5 per cent solution of calcium chloride. In these cases, he states: "After using the various vegetable and mineral astringents, large doses of opium or of its derivatives produced only a semblance of relief, but as soon as the opiates were stopped, the pain and diarrhea reappeared more severe than before." Of the seven cases reported, good results were obtained from calcium chloride in six cases. In the seventh, no benefit was noted. Doctor Fishberg makes the following generalization:

"When the diarrhea in a tuberculous patient is due to dietetic indiscretion, to the catarrhal condition of the intestinal mucous membrane, or to slight intestinal ulceration, an intravenous injection of 5 mils of a 5 per cent solution

of calcium chloride will give prompt relief. When, however, the intestinal symptoms are due to extensive ulcerations—especially to amyloid infiltration—the chances of attaining relief of the pain and annoying diarrhea are remote. Similarly, when the abdominal pains are due to irritation of the intestinal mucous membrane by the contents of the intestine, relief may be attained by intravenous injection of calcium chloride. When, however, the pains are due to localized peritonitis over deep intestinal ulcers or to peritoneal adhesions, which are not uncommon in tuberculous subjects, calcium chloride is impotent to give relief."

He states that his observation of the action of calcium chloride in diarrhea of the tuberculous "warrants its recommendations as a valuable agent in the treatment of this condition."

Local Treatment: When the ulcers can be found with the proctoscope, they should be cocanized and then cauterized with pure crystals of permanganate of potassium. Tubercular ulcers and also the strictures are much benefited by applying directly to the tissues, through a proctoscope, an ointment of
R Iodoform dr. 1, Petrolatum oz. 1.

Because rectal tuberculosis is secondary to this same infection elsewhere it is usually the lesser complaint and the patient succumbs to the primary trouble before stricture of the bowel becomes severe; but in some instances obstructive symptoms are present. If stricture occur, a removal of the diseased part of the bowel by resection is the only treatment, using the cautery instead of the knife.

REFERENCES

1. Lartigan, *Journal of Experimental Medicine*, Vol. VI, p. 41.
2. Beasley, Thomas J., *New York Medical Journal*, July, 1917.
3. Fishberg, Maurice, *Journal A. M. A.*, June 28, 1919.

“Sea-Sickness”—(Its Cause)

BY EARL RADEBAUGH, SAN FRANCISCO, CALIF.

There has been very little written on the theory of sea-sickness during the last fifteen or twenty years. We find many and varied theories given in the encyclopedias. The Americana Encyclopedia (1922) says: “The causes of sea-sickness are as yet imperfectly understood.” Appleton’s Encyclopedia says: “Its origin and nature are still very imperfectly known.” Most medical books give the *semi-circular* canal theory, which was worked out by Professor Barany. Some of the earlier authorities give the “nervous shock” theory.

In my article I show by simple mechanical laws that most of the accepted theories of today are incorrect. The substance of my theory is as follows: “All observers admit that the ascending and descending motions of a ship tend to produce sea-sickness quicker than the rolling or tilting motions. Also that a rapidly descending elevator, a swing, a sea-saw, etc., cause sea-sickness as readily as does a boat.

When we stand on the ground, gravity is pulling downward on our bodies, and the earth’s surface resists this pull. The resistance or push of the earth is against our feet, and this push is continued upward in our body, one particle (or atom) pushing against the next one higher up. Figure A represents the push or reaction of the earth’s surface. The push upward, against the downward pull of gravity, causes a *sort of elastic compression throughout our body*.

Now the pull of gravity is on a different plan. Gravity’s force is not applied just to the top of our head, similar to the earth’s surface pushing against the bottom of our feet. Gravity exerts its pull on each individual particle of our body, just as though countless fine

threads were attached to these particles and these threads run to one principal pulling object.

Figure B represents gravity’s pull.

When we jump from some high elevation, we experience a downward acceleration, and during this acceleration gravity pulls on each particle of our body, in a downward direction, while at the same time *inertia* resists or pushes in the opposite direction. Inertia, like gravity, applies its force or reaction to each minute particle of our body.

Fig. A



Earth's reaction

Fig. B

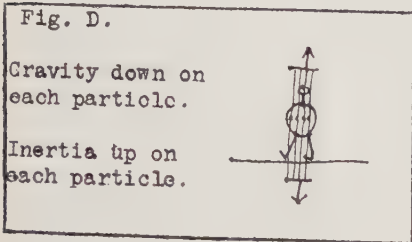
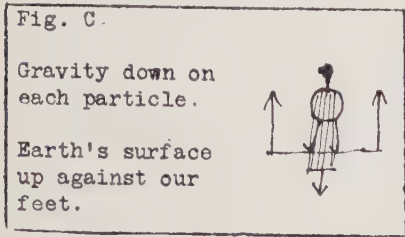


Gravity's Pull

Now just as the downward acceleration begins (during a rapid descent) the forces acting on one’s body change from the conditions in Figure C to those found in Figure D.

This reverse releases most of the elastic compression and stretch in our body. As a result it lengthens a little. Just as this change takes place, each bit of flesh, bone, and even the brain substance, make a slight mechanical shift. I claim this is what causes that almost indescribable sensation when one

falls a distance. This explains the thrill of the roller-coasters, the steep chutes in bath houses, etc.



This sensation is present to a certain degree on a rising and falling ship. The ship does not make such a free fall, however. The *sensation* resulting from the downward acceleration does not produce sea-sickness. I claim sea-sickness is caused by this same kind of action, *but which must take place in the blood vessels.* The arteries contain muscular tissue and elastic tissue. When we stand on the ground, gravity pulls downward on each particle of the blood; this elastic tissue is put under stretch and keeps the blood from running down and collecting in the large arteries. As soon as we start a downward acceleration, inertia begins its pull upward on each particle of the blood. Then these stretched elastic fibers no longer have to support the blood. As far as these elastic fibers are concerned, the blood now weighs nothing. *The elastic force of these elastic fibers is still at work and will now cause the arteries to contract and force the blood upward and flood the brain, before the muscular fibers have time to relax and counteract it.*

Halliburton, physiologist in Kings College, London, claims that the capillaries of the brain do not have the small arterioles guarding in front of them like other organs do, and which regulate the blood supply by vaso-motor action. He says the small arteries in the brain are incased in bone so as to always insure an ample supply of blood at all times. This peculiar condition would permit the contracting arteries to flood the brain. When we stand on our heads, the blood pressure is considerably increased in the brain, but the flow through the brain is not increased because the pressure in the veins is also increased, which counteracts the arterial pressure. So then we do not get sea-sick by standing on our heads. The pressure in the veins does not counteract the abnormal pressure in the arteries which is produced by the upward elastic flood, because the veins contain almost no elastic fibers,—and besides they have valves to prevent a backward flow.

Most people become accustomed to the boat's motion in a few days and sea-sickness disappears. I account for this by saying that muscular action, which releases the tension in the arteries, is quickened after several days of constant alternating work. The walls of the arteries contain muscular fibers as well as *elastic* fibers. These muscular fibers contract and relax in order to regulate the arterial pressure, as when we lie down or rise up, or to compensate for altered heart action. Man (unlike a bird) being created to walk on the ground, and not to rise and fall swiftly through the air, must sort of develop his blood vessel muscles by constant use in order to prevent sea-sickness. Those few people who never get sea-sick must have well developed muscles in their arteries.

A. L. Loomis, in a medical encyclopedia, says children under four years,

and old people who have hardened arteries, are almost immune to sea-sickness. To account for these facts, I would say the baby has very healthy muscles in its arteries. The people with hardened arteries have very little elastic fibers in their artery walls, hence there would be practically no elastic release in the arteries during a rapid downward acceleration of the body. We read in Sajous's Medical Encyclopedia (1922): "The purely physical theory of the vaso-motor action must be rejected as inadequate when seeking the cause of sea-sickness." They, no doubt, overlook this *double pull on each particle and the elastic recoil which follows it*.

When one becomes immune to sea-sickness in a few days, the increased vaso-motor action in the arteries prevents the abnormal forcing of the blood upward, but the elastic expansion continues in the other parts of the body, with each descent,—although we become somewhat used to the sensation after awhile.

The literature on sea-sickness says, and I have observed, that the worst feeling comes just as our body starts downward, and as it makes the stop at the top (turning point) after the ascent. We can reason that this feeling caused by checking an upward motion of the body, is due to the same action. When the body is accelerated to rest in an upward direction, gravity is pulling downward on each individual particle, while inertia (the stored kinetic energy) pulls on each particle in an upward direction. So we see that we have the double and opposite pull on the individual particle. The result is, the elastic fibers propel the blood upward just as it did during a descent. Then it is possible to have the *sensation of falling*, even though one be really at rest when the vertical motion is reversed at the top.

Any sea-sick person will tell you that their misery is reduced by *three-fourths* when they lie down, and that sitting is nearly as bad as standing. When sitting, the trunk is still in the upright position. My reasoning for this is that when a person lies down the muscles in the arteries relax because they do not have to support the blood against the pull of gravity. The elastic fibers still work while one is lying; they now force the blood onward after the heart valve closes. But when the body is rapidly accelerated downward *while in a lying position*, there is no abnormal forcing of the blood toward the head, because when the double pull (gravity and inertia) on each particle begins, the elastic fibers are not supporting the blood against gravity.

Many authors on sea-sickness tell about the advantages of, and relief from, binding the abdomen with a *board bandage*. In the Literary Digest (April, 1918) is an article entitled "How it feels to do stunts in the air on your first flight." This young aviator said: "For the first ten seconds during the nose-drive, it seemed to me that my entire stomach was struggling with the muscles of my throat to get through." Now some authors account for this sinking in of the abdomen during a rapid descent, by saying the air pressure on the abdomen is greatly increased,—also that the inertia of the loosely hung organs in the abdomen and chest causes them to lag behind. I say this lag could not possibly take place since all bodies fall at the same rate (air resistance neglected). In the case of sea-sickness, the sinking of the abdomen is worst as the descent begins, so then air resistance could not be the cause. It can readily be seen now that the abdomen sinks in, during a rapid descent, because of the double and opposite pull on each particle. The con-

tents of the abdomen and chest, at the time of downward acceleration, sort of lose their relative weight. In order to weigh them at this time we would have to have millions of fine threads running from their particles to one imaginary point, which represents the pull upward of inertia. The whole abdominal and chest contents is supported by the ever-contracting abdominal muscles which form the front wall of the abdomen. These muscles are elastic and under considerable tension. It is not an easy thing to consciously relax these muscles while standing, but we can overcome them by strongly contracting the diaphragm and forcing the abdomen outward.

Now as the downward acceleration begins and the abdominal and chest organs lose their relative weight, these powerful abdominal muscles force these organs upward. This act would tend to cause vomiting, irritate the liver and gall, interfere with heart and lung action, and press on the large arteries and veins. The board bandage which they speak of would keep the organs up and prevent this shifting during each descent of the ship.

To demonstrate my theory in regard to the double pull on each particle of a mass which is being accelerated downward, we need only take on board ship, or in an elevator, a large thin rubber bulb filled with water, it being supported by hanging downward, and containing a small hole in the top. Then just as soon as downward acceleration began, the water would begin to lose its relative weight, and the stretched bulb would now contract and cause the water to squirt up through the small hole at the top. But if the bulb is made from wood, there would be no flow out of the top because the wood contains practically no elastic tension. A person standing on a pair of scales in an elevator

which is undergoing vertical acceleration would show over-weight when the acceleration is upward and from rest; he would show under-weight when the acceleration is downward from rest or when it is upward to rest. His losing the *relative weight* would not be from the *inertia lag*, but from the *double pull on each particle*.

Now I shall show why most of the accepted theories of sea-sickness are wrong. Dr. Schleich (a German authority) says the pressure of the abdominal walls during the descent of a ship is due to a certain agitation of the pneumogastric nerve. He also says sea-sickness is caused by the shocks (impacts) which the motion of the ship imparts to the nervous system. This is incorrect, because the ship does not make any jerky or quick motions. We know that the smooth motion of a swing will cause sea-sickness, while such violent motions as jumping the rope, running over a rough road, tumbling on the ground, riding in a wagon which has no springs, will not cause it. The French army tried camels for transporting soldiers in Africa, but discontinued it because the soldiers were made sea-sick by the up and down motion of the camel's back. Now as a contrast, consider the jolting of a trotting horse, which does not make one sea-sick. Any one of these rough motions, such as jumping the rope or riding a trotting horse, has a fast acceleration in the downward direction, but they do not last long enough to produce sea-sickness, because the blood and abdominal organs contain considerable weight and must be accelerated to and from rest, which requires a certain amount of time. If this were not so we should become sea-sick during ordinary walking. When riding the roller-coasters or sliding down a chute, we notice the *sensation of falling* does not appear until we have descended sev-

eral feet. The elastic force released, must accelerate the mass, and hence some time is necessary. Same is true when an elevator descends; we feel the blood flow to the head after the car has dropped several feet.

Some authors say that sea-sickness is partly caused by a congestion of the brain one moment and an anemia (lack of blood) the next moment. They say when the boat rises rapidly the blood runs away from the head, due to inertia lag. This statement is logical, but when they say the blood rises and congests the brain during a descent of the boat, as a result of inertia lag, they are entirely wrong. The blood could not lag behind during a downward acceleration of gravity, because all bodies fall at the same rate (air resistance neglected). The blood is actually denser than the flesh. Before there could be a lag of the blood, the body must be accelerated faster than that which gravity gives. If the ship or elevator descended faster than gravity acceleration, we would leave the floor and rise to the ceiling; *then and only* then could there be a lag of the blood in the blood vessels.

A number of authors claim that sea-sickness is caused by a flow of the lymph in the semi-circular canals in the ears. They say that shifting of the body position causes this fluid to flow as a result of inertia. We saw before that a straight descent gave the worst feeling in sea-sickness. But the inertia of the fluid in the semi-circular canals could not cause a flow or lag when the body is *accelerated straight downward by gravity*, because it would fall at the same rate as any other part of the body.

James and Kridel noted that deaf mutes did not become sea-sick. They experimented on animals, cutting the eighth nerve, and observed that such animals could not be made sea-sick. If they say cutting the nerve to the ear makes sea-sickness impossible in animals,

I would ask why is an old person with hardened arteries and healthy semi-circular canals, immune to sea-sickness? It is said that fear will automatically cure sea-sickness in persons who are experiencing a ship-wreck. Then could we not suggest that cutting the nerve to the ear might effect the vaso-motor control of the blood vessels in some way through the sympathetic nervous system, so as to eliminate the flooding of the brain. They say that deaf mutes are immune to sea-sickness. According to my theory of sea-sickness, an elevator operator should be very nearly immune to it.

Cutting the nerve to the ear which has to do with the balancing muscles may release much nervous energy to other parts of the body, and which may quicken the vaso-motor action. Sea-sickness will come quicker and be more severe to a person who is greatly fatigued. After walking rapidly until very tired, I entered an elevator and took a number of trips up and down, making many stops, and became very sea-sick as a result. If no fatigue had been present, these same movements would not have been sufficient to cause sea-sickness. It would seem, then, that sea-sickness is caused by a too slow action in the muscles of the blood vessels. When one has become accustomed to the boat's motion and sea-sickness is no longer present, we may discover that the abnormal up-flow of blood has ceased. If so, we can say that sea-sickness has no relation to the semi-circular canals, even though they may produce dizziness, staggering, etc., when the lymph is agitated.

I trust this article will be found interesting by nearly everyone, since I show what produces that awful sensation of falling which all have experienced. It ought to be of special value to those who seek to cure or prevent sea-sickness.

John Addison Fordyce

BY THE UNITED STATES PUBLIC HEALTH SERVICE

The death of Dr. John Addison Fordyce on June 4, 1925, has deprived the medical world of an able teacher and research worker. His continued studies and investigations will go down into the annals of modern medicine as distinct contributions to the science and art of Dermatology and Syphilology.

Dr. Fordyce was born in Guernsey County, Ohio, on February 16, 1858. He studied at Adrian College, the Chicago Medical College, and the University of Berlin, receiving the degree of Doctor of Medicine from the two last named institutions, from the Chicago Medical College in 1881 and from the University of Berlin in 1888. As early as 1891 his Alma Mater, Adrian College, from which he previously received the A.B. and A.M. degrees, conferred upon him, as a recognition of outstanding service and achievement, the honorary degree of Doctor of Philosophy.

Dr. Fordyce was Professor of Dermatology and Syphilology at the College of Physicians and Surgeons of Columbia University, Special Regional Consultant of the Division of Venereal Diseases of the United States Public Health Service, Visiting Dermatologist to the New York City Hospital, and Consulting Dermatologist in the Neurological Institute, Presbyterian Hospital, and Women's Hospital of New York City. He was known for his genuine and unselfish devotion to and interest in the prevention of disease and the advancement of medicine. He was ever ready to join enterprises which offered opportunities for service. In 1920 he gave a notable series of lectures, on the diagnosis and treatment of syphilis, at the Institute

on Venereal Disease Control and Social Hygiene held at Washington, D. C., under the auspices of the United States Public Health Service. He was also an active member of a number of medical and scientific societies.

In 1896 Dr. Fordyce called attention to a disease affecting the mucous membrane of the lips, and consequently known as the "Fordyce Disease." This gave impetus to a further study of this cutaneous infection by Dr. Fordyce and others, which led to its definite diagnosis and mode of treatment. He is also known for his research in quantitative studies of syphilis from a clinical and biological point of view, neurosyphilis, spinal fluid examinations, congenital syphilis, the pathology of syphilis, and dermatology.

Dr. Fordyce was a prolific medical writer. He is particularly known for his contributions to *Morrow's System of Genito-Urinary Diseases*, *Syphilology and Dermatology*, *Parker's Surgery by American Authors*, and *Wood's Reference Handbook of the Medical Sciences*. He is the author of many articles in medical journals and magazines. He was editor of the *Journal of Cutaneous and Genito-Urinary Diseases* from 1888 to 1896 inclusive, leading this specialized professional journal through an important stage in its growth and development.

Dr. John Addison Fordyce will be remembered by many students as a skillful teacher and by the medical profession at large for his research contributions to a more complete knowledge and practice of Dermatology and Syphilology.

French Lick Springs

We Americans are so accustomed to hearing Europeans disparage our places of interest, we have had our lack of tradition, lack of history, lack of maturity, cast at us so often by foreigners who visit here or whom we meet when traveling abroad that some of us are beginning to believe that we do not amount to as much as we imagined we did; and, if we are not careful, we may find ourselves becoming convinced that only in Europe are the things that count.

Can you imagine it? The continent of the great unwashed, the land of the tin bathtub and the pitcher of bathing water, the domain of squalor and wretchedness and misery, most of it avoidable, setting itself up as a superior thing, a more admirable thing, a more-to-be-respected thing than our own clean, modern, youthful United States?

They tell us about their marvelous recreation resorts. They send us pictures to print in our Sunday supplements. They inflict scenes of what they believe is the last word in luxuriousness and fine living upon us in our picture theatres. And we just literally swallow it all hook line and sinker and come back for more of the same.

Take this health resort comparison for example. No European could ever be made to believe unless he were hog-tied and led right up to it that the United States could possess anything even remotely comparable with a European Spa.

And yet the fact is that at French Lick Springs, nestled picturesquely in the Cumberland foothills of Southern Indiana the United States has a resort whose health waters are at least as beneficial, if not more so, than the best

to be had in Europe plus advantages of modernity in application which no European resort would ever permit.

Talk as I have talked with guests at French Lick Springs Hotel who for years had been under the European Spa delusion. They have tried them all and none compares in any respect with French Lick Springs.

And the beauty of this American resort is that it is a place for the well to vacation quite as attractive as any resort you could hope to find. Many who visit French Lick are there for no other reason than the unsurpassed good time they know they will find.

Here is one of the great championship golf courses of the entire world—the famous Upper or Hill Course where Walter Hagen won the American Professional title the same year he captured the coveted British Open honors. And adjacent to the hotel building is an older, easier, 18-hole course, thus providing everyone from the merest tyro to the most skilled expert real opportunity for satisfactory, enjoyable play.

Here is one of the finest hotel buildings to be found at any resort in America, an imposing fireproof structure recently added to with a unique convention auditorium wing. Here are sleeping chambers to delight the most particular and meals to tempt even a dyspeptic's appetite.

Yes, they have lots of interesting places in Europe. Nobody denies that. But when it comes to resort hotels and the things that go with such places they would discover a lot of things they never knew about during just one hour's visit at French Lick Springs.

Cause and Cure of Cancer

ABSTRACTS FROM THE BRITISH PRESS

From Our Correspondent in Edinburgh, Mr. P. J. Sterling Boyd

Looking Forward With Confidence

Dr. James Young, D. S. O., M. D., F. R. C. S. E., stated last year, in the course of an interview with a representative of *The Scotsman*, that his investigations had then reached a stage that seemed to justify him in looking forward with confidence to the ultimate result. His views, he said, on the cause of cancer were bound up with some conceptions on the structure and development of bacteria, which were of a revolutionary nature. These ideas, which he had been urging on the profession for nearly three years, had been arrived at independently from a study of the microbe which he believed to be the cause of cancer. Dr. Young's claim was that he had discovered a parasite in cancer possessing in a remarkable degree the power of changing its form to suit an alteration in its environment, a fact which had enabled it so far to escape detection. This parasite he obtained by investigations, under the auspices of the Medical Research Council, from cancerous tumors in man and in animals. He claimed that this parasite could be seen growing out of the inner recesses of the cell into the artificial nutritive medium in which he incubated the growths.

It is interesting to note that, while Dr. Young may be regarded as a pioneer in the discovery of the cancer parasite, the first investigator to maintain that a parasite could be seen in a cancerous growth was Professor Russell, also an Edinburgh man, who put forward this view in the nineties.

Forecast of Dr. Gye's Paper

The *Lancet* of Saturday next will contain a paper by Dr. W. E. Gye on "The *Ætiology* of Malignant New Growths," and it states that it marks an event in the history of medicine, "for these observations may," the journal states, "represent a solution of the central problem of cancer." The *Lancet* states that Dr. Gye's carefully controlled experimental evidence leads to certain fundamental conclusions which might be briefly summarized as follows:

All malignant new growths contain ultra-microscopic virus—or group of viruses—which can be cultivated. This applies to carcinomata and sarcomata of fowls, mice, rats, dogs, and man. The virus resides probably within the cells of the neoplasms. The virus alone, washed free from all adherent material, does not produce a tumour when injected, and does not even produce a visible lesion, but when injected together with virus-free extracts of tumours the virus produces a malignant new growth. The extracts contain, therefore, a substance called by Dr. Gye the "specific factor" which enables the virus to attack the cells of the injected animal so as to transform them into cancer cells. There is no species specificity so far as the virus is concerned, for tumours can be obtained in once species of animals with the virus obtained from the tumour of another species.

The "specific factor" shows a very strict specificity of species. Thus, in order to produce a malignant new growth in a mouse, it is necessary to use the specific factor from a mouse tumour, while the specific factor of a chicken tumour is ineffective.

There is probably also a strict specificity of tissue for the specific factor. So far only sarcomata have been obtained, and these only with a mixture of virus and the specific factor from sarcomata not carcinomata.

"The existence of a virus is," states *The Lancet*, "not merely postulated from the effects of a culture supposed to contain it as has hitherto been the case."

Mr. Bernard's Achievement

A paper by Mr. J. E. Barnard on "The Microscopical Examination of Filterable Viruses" follows Dr. Gye's communication, and in this he has applied the optical methods elaborated by him for the study of organisms of bovine pleuro-pneumonia, the largest of the known filter-passing viruses, to the study of the cancer viruses cultured by Dr. Gye, and shows that he

has succeeded in rendering the cancer virus visible, and even in photographing it. This is in itself a great achievement.

The results of Mr. Barnard's observation so closely correspond with the experimental results obtained by Dr. Gye that the existence of a living cancer virus would appear to be established. The reasons for this broad opinion follow.

"In order to make clearer the relationship existing between the virus and the specific factor definite examples may be given," states the *Lancet*. "We will call the virus obtained from a mouse tumour 'mouse virus,' and so on. Similarly, we will call the 'specific substance' obtained from a mouse carcinoma 'mouse carcinoma,' specific 'from a human carcinoma,' 'human carcinoma specific,' from a fowl sarcoma 'fowl sarcoma specific,' and so on.

"Then the following relationships have been established experimentally after injection:

"(a) Any virus alone from any neoplasm into any animal—no effect.

"(b) Any specific from any neoplasm into any animal—no effect.

"(c) Mouse carcinoma virus plus fowl sarcoma specific (1) injected into mice—no effect; (2) injected into fowls—sarcoma.

"(d) Human carcinoma virus plus fowl sarcoma specific injected into mice—nothing into fowls—sarcoma.

"It follows, therefore, that the type of malignant new growth that is produced depends upon the virus but upon the specific substance. There are, therefore, two factors concerned in the aetiology of cancer.

"(1) A living virus—the extrinsic factor; and (2) a chemical substance produced by the cells—the intrinsic factor.

"The details of the experiments undertaken by Dr. Gye and Mr. Barnard before satisfying themselves of the truth of their discovery are very elaborate, fully illustrated, and fairly guarded. The work has been done entirely for the Medical Research Council."

Progress of Cancer Fight Work of British Empire Campaign

A big purchase of radium to help in the researches which are being made to discover the causes and to assist in the treat-

ment of cancer is one of the many interesting points mentioned in the report of the British Empire Cancer Campaign, read at the annual meeting of that body, held at the House of Lords last evening.

Referring to the fact that just over £100,000 has been received by the Grand Council, the report pointed out that the money was being expended wisely under the best scientific and business control in furthering the objects for which the campaign came into existence over two years ago. It was, however, increasingly evident that the fight would be neither short nor easy, and that its duration would to a large extent depend upon the financial resources available, which were still inadequate for the great effort that was required.

£5000 Worth of Radium Purchased

Important researches in connection with the causation and treatment of cancer were being carried out with radium, X, and other rays, and in order to help this part of the work £5000 worth of radium was purchased in the early part of the year. A great deal of other research work had been done during the year, all of which was tending to increase general knowledge in regard to cancer and allied subjects, as it was felt that only by patient research and general increase of special knowledge could any answer to the many problems of cancer be discovered. The relationship between the incidence of cancer and certain irritants, such as soot, pitch, tar derivatives, heat, and O-rays was being studied scientifically under careful conditions, and definite results were being obtained. The cancer-producing properties of petroleum oils and their relationship to industrial cancer was an important field of this work.

Experiments

Experiments into the cancer-producing properties of certain animal tissue derivations were being made, as were also the effects of certain food preservatives as a possible cause of the production of cancer. The effects of various substances in relation to the production of immunity from cancer were also being studied under careful experimental conditions. Several series of experiments were being conducted on the growth of small portions of cancer tumour kept growing in glass cells entirely separate from the animal body. These experiments

had shown the possibility of producing antiserum which would kill such cancer cells without damaging the normal cells growing under similar artificial conditions. These experiments were being continued, and attempts were being made to apply them to living tissues in animals and man.

The report, which was signed by Lord Cave, the chairman, on behalf of the Grand Council, concluded: "Research work into such a difficult and complicated subject as the cancer problem is necessarily slow and laborious. It is only by continuous and patient effort that we can hope to increase our knowledge and achieve results."

Cause of Cancer

Considerable interest has been aroused by the recent announcement that two investigators of the Medical Research Council have discovered a minute organism which they believe is a causative factor in the production of cancer. It is impossible to offer any opinion of value on the claims put forward by the investigators, and full details of the experiments which have led to the discovery of the "cancer germ" have yet to be submitted to scientific experts for verification or otherwise; but it may be pointed out that research work which has already been carried out by certain other investigators in the same field has reached results similar to those now announced. Indeed, it may be said that the "discovery" of the London investigators is really a "rediscovery." Dr. James Young, of Edinburgh, has for years been engaged in patient research into the causes of cancer, and, as was pointed out by a medical correspondent in our columns yesterday, his labors resulted, in 1921, in the discovery of a parasitic organism of a complex character, possessing as one of its phases a minute filterable form which lies within the cancer cell. This organism Dr. Young believes to be the cause of cancer, and for several years he has been urging his views upon the medical profession. Apparently the London investigators have followed up a line of research similar to that adopted by Dr. Young, and apparently they have been rewarded by somewhat similar results. The idea, of course, that a minute organism is the cause of cancer is one that has been in the minds of investigators for many years. Professor Russell, another Edin-

burgh man, in the last decade of last century, was the first investigator to maintain that a parasite could be seen in a cancerous growth; and recently Dr. Louis Sambon, among others, has produced evidence pointing to the existence of a cancer germ. Thus the work of the London investigators is complementary to that which has been going on for many years both in this country and abroad; and it is to be hoped that the definite results obtained will not only confirm those already reached by other investigators, but will lead the way to new discoveries. One thing, however, must be made clear; and that is that, though the cause of cancer may have been found, the cure for cancer has still to be established. Before that is done much arduous research and experimentation will have to be carried out. The recent report of the British Empire Cancer Campaign gives an idea of the unremitting progress that is being made in that work; but it also shows that the fight against cancer has up to the present been one of ever-increasing difficulty.

One Hundred Years in One Building

The Royal College of Physicians held a *conversazione* in London, June 25, to celebrate the centenary of the occupation of the present building of the college. The guests were received by the president, Sir Humphry D. Rolleston, and Lady Rolleston. A historical note was attached to the program, stating that the Royal College of Physicians was founded by Thomas Linacre, and the charter was dated Sept. 23, 1518. Certain powers for the purpose of controlling those who practiced medicine in the city of London and seven miles around were granted to the college. Later charters extended these powers so that authority was exercised over all those who practiced in England except the doctors of medicine of Oxford and Cambridge universities. The first meetings of the college were held in Linacre's house in Knight-riding's-Street. He was the first president.

A Chicago bridge player recently was dealt 13 diamonds, bungled his bid and didn't get to play 'em. This is the first time in the recent history of Chicago when there was a legitimate excuse for a murder and none was committed.—*Little Rock, Arkansas, Gazette.*

\$2.00 A Year in Advance

Single Copies 25 Cents

The Chicago Medical Recorder

Representing
THE AMERICAN ASSOCIATION FOR THE
STUDY OF GOITER
TRI-STATE MEDICAL SOCIETY
(ILLINOIS—IOWA—MISSOURI)
MEDICO-LEGAL SOCIETY

EDITORIAL BOARD

DR. E. W. ANDREWS	DR. EPHRAIM K. FINDLAY	DR. CHAS. H. PARKES
DR. FRANK T. ANDREWS	DR. H. H. FROTHINGHAM	DR. SAMUEL C. PLUMMER
DR. WALTER S. BARNES	DR. ROBERT GAY	DR. ARTHUR R. REYNOLDS
DR. W. L. BAUM	DR. L. A. GREENSFELDER	DR. LOUIS E. SCHMIDT
DR. CHARLES C. BEERY	DR. JAMES A. HARVEY	DR. OTTO L. SCHMIDT
DR. R. W. BISHOP	DR. JUNIUS C. HOAG	DR. E. P. SLOAN
DR. HENRY T. BYFORD	DR. M. J. HUBENY	DR. MEYER SOLOMON
DR. FRANK CARY	DR. HUGH N. MACKECHNIE	DR. D. A. K. STEELE
DR. A. CHURCH	DR. FRANKLIN H. MARTIN	DR. LEE ALEX. STONE
DR. A. M. CORWIN	DR. FREDERICK MENGE	DR. HOMER M. THOMAS
DR. E. J. DOERING	DR. ALFRED N. MURRAY	DR. JOHN L. TIERNEY
DR. P. J. H. FARRELL	DR. WM. E. KENDALL	DR. RALPH W. WEBSTER

DR. P. C. E. TRIBE
12 Half Moon St., Piccadilly
LONDON, W. I.

COMMITTEE ON PUBLICATION

E. J. DOERING HENRY T. BYFORD A. P. REYNOLDS JOHN L. TIERNEY

EDITOR

THE AMERICAN ASSOCIATION FOR THE STUDY OF GOITER

E. P. SLOAN

Bloomington

Ill.

Volume XLVII

CHICAGO, ILL., AUGUST, 1925

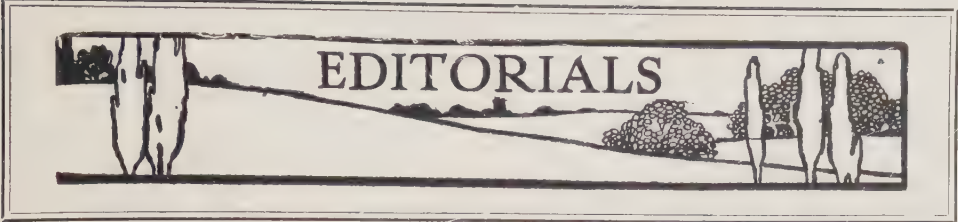
Number Eight

PUBLISHED MONTHLY

MEDICAL RECORDER PUBLISHING COMPANY, 81 E. MADISON ST., CHICAGO, ILLINOIS

The Editors and publishers are not responsible for the views of authors expressed in these pages

To Canada and Foreign Countries \$2.50



EDITORIALS

SAVING THE BABIES

In a well timed effort to reduce the mortality of infants under one year of age, a circular letter signed by the Commissioner of Health and the President of the Chicago Medical Society has been addressed to the Medical Profession of Chicago.

In this letter the statement is made that "Out of every one hundred breast fed babies only six die during the first year of life, while out of the same number of artificially fed babies twenty-five die during this same period. An appeal is made to *keep the new born baby at the mother's breast.*

The MEDICAL RECORDER endorses most heartily this effort. Physicians, midwives, nurses, and all others yield too easily to the wiles of the nursing bottle. The lack of a good supply of milk in young mothers' breasts can generally be overcome by persistent and well directed effort. It is well to add that while breast feeding saves the life of so many children during the first year its benefit does not end there, for it works to the good of those who survive the first year during all the remaining years of life.

The nursing bottle is more than suspected as a cause of so many high palates, narrow mouths, projecting front teeth and crooked teeth through prolonged use of the unnaturally shaped rubber nipple. These high palates narrow the nostril opening and favor the growth of adenoids and diseased tonsils with all their evil consequences.

WHISKEY DOCTORS

In view of our recent protest against the action of the House of Delegates of the A. M. A. in asking for unlimited whiskey privileges for physicians, we take pleasure in reprinting the following article from the June, 1925, issue of the *American Medical Association Bulletin*. The plain facts are that physicians are the greatest obstacle to prohibition in the United States today. They replace the bartenders of former days and prostitute their calling and sell their souls for filthy lucre. Indiana is right. It prohibits any physician from prescribing liquor, and their health statistics are better than those of most states.

WHISKEY PRESCRIPTIONS

A press dispatch from a town in a North Central state says that investigation by the local police has revealed that some physicians "furnish the liquid refreshments for drinking parties more often than for medical purposes;" that some physicians issue prescriptions for whiskey to other physicians and their wives; and that, in the opinion of a city commissioner, some physicians are filling the places of the old fashioned bartenders. The city council is considering the enactment of legislation designed to curtail the promiscuous prescribing of liquor by registered physicians.

Another press dispatch from a town in Louisiana states that the parish police jury adopted, by unanimous vote, an ordinance making it unlawful for physicians in the parish to prescribe intoxicating liquors. The reason given for such enactment by the police jury was that "the liquor prescribing privilege is being abused."

Still another press dispatch, bearing a Chicago date line, says that eighty physicians in

nearby towns "lost their liquor dispensing permits yesterday." Government agents reported that these physicians had turned their prescription books over to druggists. Increased liquor sales in drug stores were thus accounted for.

And so it goes. Men who sell prescriptions rather than practice medicine properly are bringing reproach on that far larger part of the profession whose lives are given entirely to legitimate practice and to the service of their fellowmen.

What is the duty of the medical society in this matter? Which element is to be protected?

DANGER TO OUR NATIONAL DEFENSE

Further reduction of army appropriations endangers the carefully worked out plans for National defense. Excessive economy restricts development whether applied personally, in business or to the army of the United States. And—when this danger is pointed out by a conservative business publication such as the *Chicago Journal of Commerce*, it is time that the general public began giving thought to the matter.

The following editorial is from the July 10 issue of the *Journal of Commerce*:

IN BEHALF OF THE ARMY

It is the unanimous conviction of the highest officers of the American army that the army will be seriously crippled if it gets less than the war department's present estimate of its financial needs. The department has pared its estimate to what it believes is the lowest possible point of safety. President Coolidge, however, is unwilling to accept the opinion of the army's chiefs. He has asked that a further reduction of \$30,000,000 be made in the estimate.

It seems to us that this is a situation in which expert advice must be accepted. It is not the function of the army to determine the country's foreign policy. It is the function of the army to accept the country's foreign policy as revealed by the administration, and to consider the country's military needs

in the light of that policy. This is what the army has done.

Under General Pershing the army drew up complex plans whereby the present regular army is to act as a skeleton force in case of war. Every man who soldiered in the World War had ample opportunity to realize the importance of such a skeleton force. In the opinion of army officers, that force is now down to its minimum strength. It must not be further weakened.

Here there is no case of militarism. There is no case of war-mongering. The United States is at peace and has every reason to believe she will continue at peace for many years. Yet it would be the height of folly to reduce her army below the strength of a skeleton force which in the event of war could be augmented into a real army.

The American business community is ardently in favor of economy. But there is such a thing as carrying the passion for economy too far. The business community does not believe in saving a \$30,000,000 appropriation at the expense of the country's safety.

If there are any arguments to refute the views of General Pershing and of General Hines, the present chief of staff, those arguments should be brought forward. But in the absence of contrary evidence, we believe the president should accept the authoritative opinions of the men whose business it is to know and who can present ten thousand technical reasons in support of their belief.

AMERICAN RECLAMATION SOCIETY

The important thing to know in connection with Banditry is the public attitude that seems to support it. Highway robbery could not be a daily occurrence in any community if the people were not willing. Newspapers print the naked stories about armed robberies, and as their subscribers enjoy reading them, publishers have no alternative. Only those directly afflicted are deeply moved by a hold-up. They turn immediately to their insurance and there the matter ends as a rule.

The American Reclamation Society in 1924, entered upon a tedious and costly research into conditions upholding Banditry, their province being that of dealing with causes, and not with criminals. They have been the means of sterilizing, so to speak, a lot of the soil in which high crime was flourishing. But the crop continues to multiply, and unless something is done to cut off nourishment at its roots, we may expect to see insurance rates advance along with mortality which is now exceeding a killing an hour.

We are prepared to state that the time for dealing with criminals is past. The police are at heart in a state of panic. There is one feasible course to pursue, and that is to sever the "tap root" of the industry by stopping the movement of revolvers by all common carriers, except by order of the U. S. Army. This can be done if gone about with full intelligence. The business men of this country hold the balance of power at Washington, and when brought to bear, can overcome the three opposing factors namely: Revolver manufacturers, Stick-up Insurance and the organized Gunmen. Any one of them is financially able to stand battle. These three, while not affiliated, have no intention of relinquishing their hold on their respective revenues.

Our hope is in *unified action* on the part of rated business men in every city, town and hamlet in America. At present their influence in this matter is nil, because they hold divergent opinions both as to the cause and as to the remedy. They can, however, be solidified by effective literature backed up by the press as planned by the A. R. S. The first step in this undertaking, that of crystallizing the sentiment of business men, is one that must be taken with the

idea of putting it over with a liberal margin. If we fail in the next session of Congress to put revolvers and pistols under the control of the Army, we shall find ourselves in a most unenviable position. As matters now stand, we appear before other civilized countries of the earth as a nation whose "fat is in the fire" and more or less, to their advantage. Therefore, the word "fail" shall not be a part of our vocabulary.

The story of how this organization became a nation wide movement is one you can imagine. There never was need for action more acute than this. If something is not done this killing and robbing business is going to continue to spread.

It costs millions in advertising to keep the public from forgetting automobiles they see every day. To organize public sentiment against the revolver—the only means a bandit has—will cost money.

If man-eating beasts were abroad in the land we would all help exterminate them, not say "let George do it." This is every man's risk and disgrace. Please send your check in the sum of \$5 to the American Reclamation Society, 408 Fort Street West, Detroit, Mich. You will receive a member card and literature from time to time—no further dues or assessments.

Behavior Institute Planned

A committee of fifty physicians and philanthropists has undertaken to raise the necessary funds to establish a Behavior Research Institute in Chicago where problems of the child may be studied and work done to prevent juvenile crime and delinquency. It will be allied to the present Institute for Juvenile Research. Booklets describing the proposed work have been sent to 1,000 citizens, whose help has been solicited to raise an annual fund of \$55,000 for the next five years.

EARTHQUAKE EXPERIENCE OF
MRS. J. H. ETHERIDGE

We take pleasure in reprinting the following copy of a letter from Mrs. J. H. Etheridge, the charming wife of our former colleague and friend, the late Professor J. H. Etheridge of Rush Medical College. It relates to her experiences in the recent earthquakes at Santa Barbara:

"Here we are at a kitchen table that was brought out for us, writing. Yesterday when the worst was over a friend took a message to wire to E. U. with instructions to let you and others know that we were alive and uninjured. The Western Union set up a station in the principal street and were swamped with messages outgoing. No incoming received. But I must begin at the beginning.

I wish now that I had risen as soon as I awakened—at six—but I didn't. I waited until six-thirty, sat up on the side of the bed instead of on a chair, as usual, and put on one stocking and slipper when suddenly the bed and I began to go back and forward somewhat violently, but I hung on, and while I was thus weaving with the bed Aunt Lotte's large oil painting came down, hitting the chair on which I usually sit when I put on my stockings. That was scarcely done, when with a rush and a bang out went my fireplace and chimney, leaving a large open space. Later I found that Aunt Lotte's and the large one in the living room had also gone at the same time. The bed and I kept weaving for a second or so longer and then I heard a call and then Henry (Dr. Ullmann) rushed from his room and went to each room, and to mine, which I had locked. He proceeded to break it in, but I got there and unlocked it before he had done any damage. He ordered us each one to go down to the lawn at once. He was in pajamas, and I in my night gown. I had my other stocking in my hand and my bedroom slipper on my left foot, and downstairs I went, sat down in a chair by the door and put on the other stocking and bedroom slipper. Then Taka came and when he saw that all I had on was my nightie, he ran upstairs and brought down my long coat, put it on me, and out I went and found Aunt L. there wandering around alone. She had her corduroy wrapper over her nightgown. We sat down in the rustic chairs already

there, and then Helen was brought down by Henry and the two Japs. Little H. was already down, and Henry, Jr., was at camp with his Scout troop. He is to be sent for this A. M.

Taka and the cook had run up to support L. downstairs. The nurse was only partly dressed when the shock came, but she tried to reach Helen and stumbled and staggered from her room to the hall and there she fell flat on the floor and found it difficult to rise. When she did get up and reached H.'s room the book case filled with books by the wall at the foot of H.'s bed had fallen on its face and was wedged in between the wall and the bed. But we are all safe and unhurt, and are very thankful.

After we were all on the lawn, there was another quake which made the house creak and creak again, but since then nothing as serious, although we did not enjoy any of them. Our chairs would tumble and we with them. Henry said the thing to do was to scatter so there would be one or two left to help those who might be injured. H. did not want anyone to enter the house for a few hours, so I wrapped L.'s old motor coat around me and managed to be comfortable. We must have been beautiful sights!

Toward noon we went into the house one at a time, to dress and secure what belongings were most necessary. H. had been down town and secured two auto tents. Single beds were brought down. All electricity was turned off, of course, so he brought a kerosene stove, and a friend went down for provisions, bread, butter, bacon, ham, etc. We will sleep in the tents for six weeks, I believe, for the house is too wrecked to live in, and the business structures must be rebuilt first.

Our rooms are a hodge podge. L. had lost many things she brought from the east, the Aunties' (Misses Emily and Susie Powers) clock for one thing—a shock shook the house while I was writing 'thing'—but the glass vase that was Great Aunt Lotte's fell from the mantel to the floor and hasn't a crack in it. The old bureau of the aunties' is prone on its face.

Tuesday. The U. S. S. Arkansas was in the harbor yesterday but left after an hour or so. There are three destroyers there. One hundred and forty policemen and some detectives came up from Los Angeles.

Today Mr. F. has brought up a large tent for L. and me. It will be very roomy, which

is convenient, for we will have our trunks in it, besides a dresser, a wash stand, some chairs, a table and a wardrobe. We call our tent the 'Camp de Luxe,' but it is not quite so comfortable as the house was, for the sun at times makes the canvas shelter too warm; then come the damp fogs, which make us wrap up in thick coats and winter shawls, so we are continually moving to get either into the shade or into the sun. But we have electricity now, electric lamps at our beds and an electric stove. We also have a wooden floor. I do not doubt but that the open air will do us all good.

A friend of ours who now lives here but who has lived many years in Peru, said she had been through a hundred earthquakes, but this was the worst she was ever in; and Mr. F. who went through the San Francisco quake says this was worse than that, without the fire.

I am convinced that I do not want to live west of the Rockies."

363,063 CASES OF VENEREAL DISEASE REPORTED IN 1924

An increase in the number of cases of venereal disease reported in the United States in the year which ended June 30, 1924, over the number reported in the previous corresponding year is disclosed by the figures recently made public in the annual report of the Division of Venereal Diseases of the United States Public Health Service. The report indicates that the increase in the fiscal year 1924 amounts to 27,382 cases, or 7.2 per cent. A total of 363,063 cases of venereal disease were reported to the various state boards of health from all sources. This total was composed of 193,844 cases of syphilis, 160,790 cases of gonorrhea, and 8,429 cases of chancre.

"The fact that the 1924 statistics show an increase over those for 1923 does not necessarily mean that venereal disease was any more prevalent in the United States last year than in the year before," explains the chief of the Division of Venereal Diseases.

"The greater number of cases now on record at the state boards of health," he continues, "may well be accounted for by the increased efficiency in detecting these maladies and by more conscientious reporting of cases on the part of private physicians. For a long time the danger from syphilis and gonorrhea was greatly enhanced by the fact that these diseases were carefully covered and concealed and were often kept secret even from physicians who might have brought about a cure. Fortunately people are now learning that they must go to a reputable physician or clinic if they wish to be cured, and laws requiring that these cases be reported to the state boards of health are making it possible to obtain some idea as to the prevalence of syphilis and gonorrhea in the country, although there are many cases that still escape discovery."

During the fiscal year just passed, 504 public clinics reported to the state boards. These clinics treated 118,023 new cases of venereal disease made up of 65,046 cases of syphilis, 49,029 cases of gonorrhea, and 3,949 cases of chancre. A total of 2,147,087 treatments were given. The fact that these clinics made 302,152 Wassermann tests for detecting syphilis and 203,008 examinations to discover gonorrhea would seem to indicate that people are beginning to realize the terrible consequences that follow in the wake of these diseases and are willing to take advantage of reputable opportunities for cure.

Reports from 37 correctional and penal institutions were received by the division. The efforts of those in charge of these institutions have resulted in a large increase in the number of venereally diseased persons discovered and treated. New patients to the number of 7,045 were admitted to treatment in 1924, an increase of 44 per cent over the year 1923.

The menace of venereal disease is one that is being fought by the United States Public Health Service and the various state boards of health acting in cooperation with municipal health officers. These governmental agencies are trying to impress upon parents, teachers, young people and others the need of wholesome sex education, of prompt medical attention and the necessity for the passage of modern health ordinances and legislation. Among the social institutions which can aid in the fulfillment of this program are the home, the school, the church and the press.

AMERICAN ASSOCIATION FOR THE STUDY OF GOITER

At the mid-year session of the American Association for the Study of Goiter, held in Atlantic City, Tuesday, May 26, the following program was given. These papers will be published in early issues of the *MEDICAL RECORDER*.

PROGRAM

Morning, 9:00 o'clock

- Business Meeting.
- Installation of President, Doctor E. G. Blair, Kansas City, Mo.
- Address of the Retiring President, Doctor E. P. Sloan, Bloomington, Ill.
- The Exophthalmic Goitre Case Before and After Operation—Doctor C. C. Tiffin, Seattle, Wash.
- Reflections of an Internist on the Thyroid Problem—Doctor C. H. Neilson, St. Louis, Mo.
- Goiter in Utah—Doctor J. S. Alley, Midvale, Utah.
- Toxic Goiters of the Adolescent Age—Doctor J. Earl Else, Portland, Ore.
- A Pharmacodynamic Consideration of Thyroid Secretion—Doctor Vincent La Penta, Indianapolis, Ind.
- Comparative Anatomy and Embryology of the Thyroid in Relation to its Pathology—Doctor George Van Amber Brown, Detroit, Mich.
- Findings and Results in One Hundred Cases of Goitre Surgically Treated—Doctor B. T. King, Seattle, Wash.

Afternoon, 1:30 o'clock

CONFERENCE on Prophylactic Measures, Surveys, Investigations, Et Cetera, by the Committee on Goiter Prevention, composed of Doctors Robert Olesen, Cincinnati; Israel Bram, Philadelphia, and representatives from each State Medical Society and each State Board of Health.
Doctor Robert Olesen, Presiding

The Medical Arts Club of Chicago

The Medical Arts Club now being organized in Chicago is not to be a social club alone. Its dominant idea is to provide a home for the medical profession and to center there all activities of the component groups in both medicine and dentistry. The building will contain an auditorium, small meeting rooms, and a banquet hall fully equipped to care for all meetings of the various groups.

The Club itself will be the operating organization, having to do with the property, its management, and the detail necessary to the conducting of a well run Club. It will have sleeping quarters, dining rooms and card rooms.

"The Medical Science Academy" will be one branch of the work, governed and controlled by the Club membership. Its purpose will be to invite as fellows, members of outstanding achievement—a Medical "Hall of Fame."

Another feature, the Medical Science Development Foundation is designed to initiate and expand the club's medical library and to organize a research department. Also to seek and administer funds from laymen for extended scientific investigation.

The Club will offer attractive social possibilities for its members and their guests. A complete gymnasium and physical culture department will provide athletic recreation.

Special attention will be given to the Women's department, with its writing room, dining room, lounge, etc.

The Board of Governors of the new club is composed of John S. Nagel, M. D., president; John H. Cadmus, D. D. S., vice-president; Robert H. Hayes, M. D., vice-president; Joseph F. Biehn, M. D., treasurer; James J. McKinley, M. D., secretary; W. F. Dickson, M. D.; Hugh N. Mackechnie, M. D.; Karl A. Meyer, M. D.; M. M. Printz, D. D. S.; Edward H. Ochsner, M. D.; Harry B. Pinney, D. D. S.



BOOK REVIEWS

THE SEXUAL LIFE. EMBRACING THE NATURAL SEXUAL IMPULSE, NORMAL SEXUAL HABITS AND PROPAGATION, TOGETHER WITH SEXUAL PHYSIOLOGY AND HYGIENE. By C. W. Malchow, M.D., Formerly Professor of Proctology and Associate in Clinical Medicine, Hamline University College of Physicians and Surgeons. Sixth Edition, St. Louis: C. V. Mosby Co. Pp. 317. \$3.50.

The author has handled this very difficult subject in an absolutely open and admirably direct manner, avoiding all pornographic inclinations (as so many others do not) but not glossing over facts which should be known. He has faced reality and grappled with it in a truly scientific and impartial manner. Exaggeration and sensationalism have been avoided.

He discusses in order "sexual sense" and "sexual passion" in general and in both male and female, the copulative function and the act of copulation, sexual habits in the married, hygienic sexual relations, sexual inequality, copulation and propagation, and nervous women.

Here one finds no tendency to harp upon sexual perversion and the other sexual possibilities made so much of by others, especially by certain sexologists and psychoanalysts. The discussion centres about normal sexuality for average persons. Contraception is not included.

All in all this is one of the sanest, frankest and most truthful popular presentations of this subject that one

can find. It can be safely recommended for reading and use by the lay reader, especially those married or about to be married. The physician will also find it of great value.

MEXER SOLOMON.

TEXTBOOK OF DIFFERENTIAL DIAGNOSIS OF INTERNAL MEDICINE. By M. Matthes, M.D., Professor of Medicine and Director of the Medical Clinic, University of Königsberg. Authorized translation of the fourth German edition with extensive additions by I. W. Held, M.D., and M. H. Gross, M.D. With 176 illustrations, some in colors. P. Blakiston's Son & Co., Philadelphia, Pa.

Matthes work on Differential Diagnosis of Internal Medicine is one of the best works on the subject with which we are acquainted. It is, of course, a translation of the fourth German edition by Drs. I. W. Held, and M. H. Gross of New York City. And it is a most valuable book from cover to cover which every progressive man who has Green's "Differential Diagnosis" should also have in order to get the different view point.

We may quote from the introduction by the translators as follows: "With a skill equal to that shown by his avoidance of an involved and weighty display of theoretical knowledge, the author makes no confusing comparison between the symptoms of two diseases; which seems to us to be the mistake of most writers on differential diagnosis. Consequently, each individual disease is dis-

cussed by Matthes singly, and its most characteristic clinical symptoms explained without reference to any other apparently allied syndrome." After reading several pages at random throughout the book, we have no hesitation in recommending it, and it is quite unlike any other book we have on that subject by reason of the quotation above.

It should be also added, to the credit of the translators, that they have added a great deal of valuable material, especially in the pages on influenza, circulatory diseases and roentgen diagnosis of respiratory diseases, chronic appendicitis, ulceration of the stomach and duodenal and other additions throughout the book under the head of translators remarks so that we would much sooner have the English edition than the original one in the German language even if we could read both equally well. The contents, in brief, are as follows:

Contents in Brief: The Differential Diagnosis of Acute Febrile Infectious Diseases; of Chronic Febrile Conditions with Moderate Elevation of Temperature; of the Meningeal Symptom-Complex; of the Peritonitis Symptom-Complex; of Ileus and Intestinal Stenosis; of Diseases of the Larynx and Trachea; of Diseases of the Smaller Bronchi and the Lungs; of Infiltration of the Lungs; of Cavity Formation in the Lungs; of Tumors and Cysts of the Lungs; of Diseases of the Pleura; of the Circulatory Diseases; of Diseases of the Spleen; of Diseases of the Liver and Biliary Ducts; of Diseases of the Esophagus, Stomach, Intestines and Pancreas; of Chronic Diarrhea, Constipation and Appendicitis; of Diseases of the Lower Parts of the Colon; Parasites of the Intestinal Canal; Differential Diagnosis of Constipation; Chronic Appendicitis and Its Differential Diagnosis; Differential Diagnosis of Diseases of the Pancreas; of Diseases of the Urinary

Organs; of Some Diseases of Metabolism and the Endocrine Glands; of Diseases of the Blood; of Chronic Joint Diseases; of Bone Diseases; of Neuralgias and Neuralgic Like Pains; of Headache.

A COMPOUND OF GYNECOLOGY. By William Hughes Wells, M.D., Late Assistant Professor of Obstetrics in the Jefferson Medical College; Assistant Obstetrician in the Maternity Dept., of the Jefferson Medical College Hospital, etc. Fifth edition, revised and enlarged by William Benson Harer, M.D., instructor in Obstetrics in the Howard Hospital, Assistant visiting physician in the Philadelphia Lying-In Charity Hospital. With 167 illustrations. P. Blakiston's Son & Co., Philadelphia, Pa.

While, as a rule we do not have much use for a compendium, we must frankly state that Harer's book is an exception to the general rule, based on his long experience as instructor in obstetrics and gynecology in the University of Pennsylvania and various hospitals. This book is absolutely reliable and up to date.

As this is the fifth edition, revised and enlarged, it shows that the book has received due appreciation by students and younger practitioners. The fact that Professor Barton Coke Hirst has made many suggestions in this revision, thereby giving approval to this book alone justifies our cordial endorsement of this compendium.

A PRACTICE OF GYNECOLOGY. By Professor Henry Jellett, M.D., Dublin University, F. R. C. P. I. 5th edition. 417 illustrations. 15 colored plates. Lea and Febinger, Publishers, Philadelphia.

We are delighted to receive the fifth edition of Professor Jellett's wonderful work on Gynecology. It is one of the most practical books on the subject and

reflects the greatest credit on the Ex-Master of the celebrated Rotunda Hospital of Dublin. We know of no better work any Gynecologist or Practitioner could purchase than this volume. Everything is described in detail, but in concise, easily understood language, the pathology clearly illustrated and diagnosis made as simple as possible, and the treatment always the best. Books like this, based on vast experience, representing the author's own knowledge, are always of incomparable value. The present edition has, of course, been thoroughly and extensively revised, a great many new sections and chapters have been added such as on "Ovarian Transplantation"; "Gas Inflation of the Peritoneal Cavity and of the Fallopian Tubes"; "Implantation Adenomata of Endometrial Origin"; "Sterility"; "Radiotherapy in Gynecology"; "Vaccine Treatment in Gynecology," etc. The talented author is now Consulting Obstetrician to the Department of Public Health of New Zealand, Australia, a position in which we wish him all possible success and congratulate the great Commonwealth of Australia in having been able to obtain his services.

WILLIAM CRAWFORD GORGAS. *His Life and Work.* By Marie D. Gorgas and Burton J. Hendrick, Lea and Febinger, Publishers, Philadelphia and New York.

We have seen it stated that this book does not do justice to General Gorgas, but we do not agree with this opinion. On the contrary, we think it a most interesting book from cover to cover, and while no doubt much more could be said and it is unquestionably hard to do full justice to so wonderful a character and a man of such transcendent ability as General Gorgas, we know that the reader will be well pleased with this book.

It covers the early days of the Gen-

eral, his ancestry and youth, his battle with the jungle and yellow fever; describes how nearly the Panama Canal would not have been built if the wishes of certain politicians had been respected and General Gorgas had been removed; it further shows our own President Roosevelt saved the Canal by standing back of General Gorgas and also appointing Colonel George W. Goethals; also General Gorgas' work during the World War and the final termination of his wonderful life in London, including the great deference shown to him by the King of England and the leading statesmen of his time.

DYSPEPSIA: ITS VARIETIES AND TREATMENT. By W. Soltau Fenwick, M.D., B. S. (London), Late Physician to the Evelina Hospital for Sick Children, London. Second Edition, Revised. Philadelphia and London: W. B. Saunders Company. 1925. Cloth, \$6.00 net.

Evidently our English friends are following in the footsteps of their American cousins in changing their case iron stomachs to the celebrated and American stomach, something they were never afflicted with before the war. Anyone who has read any of Dr. W. Soltau Fenwick's books on Cancer, Ulcer of the Stomach, etc., will welcome a book on dyspepsia. This is the second edition, thoroughly revised, some pages having been practically rewritten, especially the one dealing with the displacements of the viscera. After considering the various varieties of dyspepsia and their differential diagnosis, the author considers, in various pages, the diseases due to abnormalities of secretion like hyperacidity, hypersecretion, etc., then the diseases due to failure of the muscular power of the stomach, those due to inflammation of the stomach, like acute and chronic gastritis, etc., then dyspepsias due to dis-

turbances of the nervous mechanism of the stomach, like gastric neurasthenia, nervous irritation, etc., dyspepsias due to displacement of the stomach, others due to the pressure of foreign bodies and living creatures in the stomach, then again dyspepsia in infancy and old age, dyspepsia depending upon diseases of other organs like the dyspepsia of phthisis, heart disease, diabetes, etc., and finally intestinal dyspepsia in its various phases.

The book ends up with a very complete bibliography and excellent index. Too much cannot be said in praise of this book, and we feel grateful to W. B. Saunders, the publishers, in calling our attention to its many merits. It is worthy of careful study.

INFECTIONS OF THE HAND. A Guide to the Surgical Treatment of Acute and Chronic Suppurative Processes in the Fingers, Hand, and Forearm. By Allen B. Kanavel, M. D., Professor of Surgery, Northwestern University Medical School; attending surgeon, Wesley Memorial Hospital, Chicago. Fifth edition, thoroughly revised. Lea & Febinger, Philadelphia and New York.

This book stands without a peer in its chosen field. It is a master work, and five editions testify to its popularity in the surgical field. There is nothing to say in regard to a book so well recognized as an authority in all infections of the hand. But we do wish to emphasize again what the author says, as follows: "If the surgeon is to secure the best results, he must not only control the infection, he must also preserve the function of the hand. In a structure as intricate as the hand, with its different nerves, its multiple joints and tendons, acting in different planes, its definitely arranged blood supply, the preservation of function presents a complicated problem that should be uppermost in mind

from the very inception of treatment." This is the way of this valuable book, which we believe is already found in the library of every surgeon worthy of the name.

MEDICAL AND SURGICAL REPORT OF THE ROOSEVELT HOSPITAL. New York, Second Series, 1925, Based on the work of the years 1915-1924, inclusive. Editorial Board: Alexander T. Martin, M. D., Thomas C. Peightal, M. D., Alfred Stillman, M. D., Henry C. Thatcher, M. D., Davenport West, M. D., Kirby Dwight M. D., Chairman. Paul B. Hoeber, Inc., New York City. Price \$5.00.

This report of the Roosevelt Hospital is an example for all other large hospitals to follow, showing the great amount of valuable work all done at this ideal hospital during the years 1915 to 1924, inclusive. The list of contributors numbers twenty-two, consisting of various members of the staff, surgeons, neurologists, pediatricians, gynecologists, and physicians. The book reminds us of "Surgical Clinics," published by Saunders Company, and the cases reported are, of course, selected cases only.

Among the large number of cases reported we may mention fractures of the elbow, the advance of the Mikulicz two-stage operation on partial colectomy, the surgical treatment of megacolon, Lead-pid fracture of the radius, cerebral abscess in operation, carcinoma of the colon, extra utery pregnancy, tumors of the breast, etc. The cases are illustrated and all of exceeding interest.

PROCEEDINGS OF THE INTERNATIONAL CONFERENCE ON HEALTH PROBLEMS IN TROPICAL AMERICA. Held at Kingston, Jamaica, B. W. I., July 22 to August 1, 1924. By invitation of the Medical Department United Fruit Company. Published by United Fruit Company.

We certainly must congratulate the United Fruit Company on having so capable and accomplished an officer as Dr. William E. Deeks, general manager of their medical department, who conceived and carried out an international conference on health problems in tropical America, which met at Kingston, Jamaica, July 21 to August 1, last year.

The book before us, of about 1,000 pages, is replete with the most interesting problems pertaining to tropical diseases, the first progress in this line since the work of Col. John R. McGill, Professor of Tropical Diseases, at one time in the old Rush Medical College. Lack of space prevents us from naming all the prominent men who attended from Cuba, Porto Rico, Guatemala, Costa Rico, Honduras, Canal Zone, Jamaica, Panama, Venezuela, British Guiana, Brazil, Haiti, and a large representation from England, Canada, and the United States.

England was represented by Professor Castllani of the London School of Tropical Medicine, Sir James K. Fowler, consulting physician to the Brompton Hospital, Sir W. Arbuthnot Lane, consulting surgeon to Guys Hospital, Sir Leonard Rogers of the London School of Tropical Medicine, and others. Canada sent their well known Professor Fred'k G. Banting of the University of Toronto, John L. Todd, Professor of Parasitology, McGill University, Montreal. And the United States was represented by Professor C. C. Bass of Tulane University, Louisiana, L. M. Boyers, University of California, Commander C. S. Butler, United States Navy, Assistant Surgeon General United States Public Health Service H. R. Carter, Professor C. A. Kofoed, University of California, H. R. Muller of the Rockefeller Foundation, H. J. Nichols of the United States Army, and a number of others.

The many papers discussed, of course, referred to tropical diseases only, like black water fever, yellow fever, bacillary dysentery, schistosomiasis, tropical dermatology, ainhum and its bone pathology, pinta or carate with special reference to treatment, alastrim trypanosoma venezuelense, and a number of other similar interesting subjects.

NEWER METHODS OF OPHTHALMIC PLASTIC SURGERY. By Edmund B. Spaeth, M. D., F. A. C. S., Chief, Eye Clinic, Walter Reed, U. S. Army General Hospital, Washington, D. C., Clinical instructor and assistant in ophthalmology, The Army Medical School, Washington, D. C.

As General W. H. Wilmer of the medical corps United States Army well states in his foreword, Major Spaeth has made an important contribution to surgery and supplied a real ophthalmic need in publishing this valuable book. Ocular injuries during recent wars have formed 1.20% of all in the Crimean war, only 0.50% in the American Civil war, 0.83% in the Franco-Prussian war, and about 2% in the World war on account of the new forms of explosives used.

As plastic ophthalmic surgery requires an expert of no mean order to do even fairly satisfactory work, it behooves every man to give this matter his most earnest attention, and study this book carefully, which is based on a large amount of experience, especially during the late war.

Space does not permit us to go into a detailed description of all the contents of this valuable book, but suffice it to say that it covers the subject in the most thorough, masterful, way. It is well illustrated with all original drawings. A valuable appendix covers the literature to date. We most cordially recommend this book to our readers.



NEWS ITEMS

Dr. Herman Goodman of New York City has moved his office to 18 East 89th street.

A Million for Washington University

It has been announced that Charles Rebstock has given \$1,000,000 to Washington University, St. Louis.

Chicago Hospital News

The Baptists of Chicago are making plans to purchase the Metropole Hotel at Michigan Boulevard and Twenty-third street, to be converted into a hospital.

The Michael Reese Hospital is making plans for a \$1,000,000 addition, including a laboratory building.

Promotions at St. Louis University

Dr. William W. Graves, for a number of years chairman of the department of neurology at the St. Louis University School of Medicine, has been appointed director of the department; Drs. Louis Rassieur and Max W. Myer have been advanced from the rank of associate professors of surgery to professors of surgery; Dr. Charles F. Sherwin from instructor in surgery to assistant professor of surgery, and Dr. Harvey D. Lamb from instructor in ophthalmology to assistant professor of ophthalmology.

Kansas City Requires Examination for Food Handlers

A recently passed ordinance in Kansas City requires that every person who handles foodstuffs intended for public consumption undergo a physical examination every ninety days. The examination must be made by registered physicians in good standing and a report of the examination filed with the health department. Dr. Herman E. Pearse, city health director, has requested all physicians of the city to register with the health department in order to obtain an accurate list of reputable practitioners and a record of their professional status.

Making Immigrants Chiropractors

The Journal of the Indiana State Medical Association says that it has been announced in the newspapers that the Ross School of Chiropractic, Fort Wayne, has been designated officially by the U. S. Department of Labor as an immigrant school and that foreigners coming to the United States to study will be allowed to land without regard to the immigration quota when they are to be enrolled in that school.

New Milk Laws

A law becomes effective, September 1, which requires all milk pasteurizing plants, except those concerned exclusively with markets in cities of 500,000 or more people, to secure a certificate of approval from the state department of health. The certificates can be issued only after an inspection of the plant by a sanitarian, and milk dealers who do not employ the standard pasteurizing process will be prohibited from advertising their products as pasteurized. Another new law relating to milk provides, among other things relating to tuberculin testing, that municipalities may prohibit the sale of milk from any herds that have not been tuberculin tested.

President of University Appointed

Clarence C. Little, LL.D., since 1922 president of the University of Maine, has been elected president of the University of Michigan, Ann Arbor. Dr. Little is a graduate of Harvard; in 1917-1918 he was associate in comparative pathology at Harvard Medical School, and research associate from 1919 to 1922. He was assistant director of the station for experimental evolution of the Carnegie Institution, Washington, D. C., previous to his appointment as president of the University of Maine.

Funds Available for Medical School

The board of trustees of Indiana University, at a meeting, June 25, made available sums totaling \$700,000 for improve-

When You Prescribe Gray's Glycerine Tonic Comp.

(Formula Dr. John P. Gray)

and your prescription is filled by some cheap, worthless substitute which some druggists buy in bulk, your efforts are defeated and your patient's condition is jeopardized. You owe it to yourself as well as to your patients to make sure that they get

The Original "Gray's"

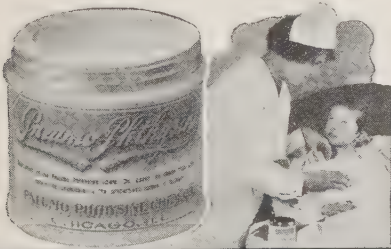
which has 35 years of faithful service to the medical profession as its guarantee of

1. Highest Quality of Its Ingredients
2. Painstaking Care and Skill in Its Compounding
3. Uniformity and Integrity of Character
4. Maximum Therapeutic Efficiency

There is only one Gray's Glycerine Tonic Comp. Insure your results and safeguard your patients by writing your prescription as follows—

R
Gray's Glycerine Tonic Comp. (J. J. Co.)

The Purdue Frederick Co., 135 Christopher St., New York City



Pneumo-Phthysine INDICATED IN FEBRILE CONDITIONS.
Write for clinical trial jar.
PNEUMO-PHTHYSINE CHEMICAL CO.
220 West Ontario Street, Chicago

THE PEOPLES HOSPITAL AND TRAINING SCHOOL FOR NURSES

The Ideal Wage Earners Hospital of Chicago
22nd Street at Archer Ave. CHICAGO

Prepared to care for emergency Cases day or night. A full Corps of experienced Physicians and Nurses always in attendance. Affiliated with the Northwestern Medical School. We solicit the co-operation of all Physicians

Ward Rates \$15.00 Per Week, Private Room Rates
\$30.00 to \$45.00 per week.

Phones Victory 2040 and 2041.

I. C. Gary, Pres. Minnie Schrei, Supt. Tillie Schaer, Associate Supt.

Chicago Maternity Hospital and Training School for Nurses and Midwives

Address DR. EFFA V. DAVIS
512 Wrightwood Ave.
CHICAGO

SAL HEPATICA LAXATIVE and ELIMINANT

Efficacious in all conditions where intestinal sluggishness arising from functional derangement of the liver and portal circulation is a factor. Sal Hepatica cleans the entire alimentary canal.

Samples for Clinical Purposes
Bristol-Myers Co.
New York

ments in the medical school and a university library. The funds to be used for the medical school were derived from a gift of \$375,000 from William E. Coleman, Indianapolis, a gift of \$6,000 from the Eli Lilly Company of Indianapolis, and from the sale to the state of the building formerly used by the medical college, for \$100,000. Mr. Coleman's gift for the erection of a woman's hospital in Indianapolis will be under the direct supervision of the medical college. The Lilly gift of \$6,000 is for special research work in surgery, and the \$100,000 derived from the sale of the old building will go into the general sinking fund of the University Medical College.

Apparent Increase in Typhoid Fever

The U. S. Public Health Service has summarized the reports of cases of typhoid fever received during the first half of 1925 and compared them with the same period of last year from the same states and cities. The number of states reporting each week varies from thirty-two to thirty-four, and the total number of cases up to July 1, 1925, was 7,490 as compared with 5,960 for the first half of 1924. In the summary of cases reported from the cities, there were 2,253 cases of typhoid up to July 1, this year, as compared with 1,763 for the same period last year. The number of cities reporting each week varied from ninety-eight to 105. Some of the increase, it is said, is probably due to improvement in reporting. Some increase has been noted in many sections of the country over last year, but the greatest difference in recent weeks has been in the South Atlantic and East South Central states.

Tuberculin Standardized by New Method

The Chicago Tuberculosis Institute takes pleasure in announcing the discovery of a new way of standardizing tuberculin. This was reported at the recent meeting of the National Tuberculosis Association in Minneapolis as the work of Dr. Esmond R. Long of the Department of Pathology, University of Chicago.

Tuberculin is used in discovering tuberculosis in cattle and in treating the disease in man. No chemical method of measuring units of tuberculin is at present possible, says Dr. Long, although promising work in this direction is under way. But

he has found that it can be gauged by its effect on certain cells of laboratory animals, such as guinea pigs. The results are to be observed under the microscope.

The discovery will be of great service in connection with both bovine and human tuberculosis. The work has been carried on by Dr. Long at the University of Chicago with the aid of a grant from the National Tuberculosis Association, and is part of a series of correlated researches conducted through the Association on the nature of the active products of the bacillus of tuberculosis.

Though a young man, Dr. Long is well known as a tuberculosis specialist; he is a member of the board of directors of the Chicago Tuberculosis Institute.

Training Camp for Medical Reserve Officers

The training camp for medical reserve officers that closed at Fort Snelling, Minn., July 18, 1925, was the most successful camp of instruction since the close of the war. Three hundred and sixty medical officers took the course, including the officer personnel of five medical regiments. Twelve states were represented. Fifteen hundred university reserve officer students were in the camp. Col. Jere B. Clayton, M. C., Chief Surgeon 7th Corps Area, was commandant; Maj. Henry B. McIntyre, M. C., executive officer; Maj. H. H. Smith, M. C., assistant to the commandant, and Capt. Weinberg, M. A., adjutant. A medical reserve training association was organized.

Stearns Fellowship

Frederick Stearns & Company have founded at the University of Michigan, the Frederick Kimball Stearns Memorial Fellowship in Medicine, in honor of the late Frederick Kimball Stearns.

Mr. Stearns was a life-long patron of the Arts and Sciences, and had shown a special interest in the progress of the University of Michigan. The Stearns' Botanical Gardens, the Stearns' Fellowship in Pharmacy and the Stearns' Collection of Musical Instruments, the most complete collection of its kind in the world, were evidences of his interest and generosity.

While the medical fellowship is to be used at the direction of the University

ENDOCRINE REMEDIES

BY A RELIABLE HOUSE

ORGAN-O-TONES No. 19 (Thyro-Pituitary Co.)

Thyroid substance	1/2 gr.	Apocynum (P. E.)	1/4 gr.
Pituitary (whole)	1/4 gr.	Organotones No. 12 q. s.	7 grs.
Phytolaccin	1/2 gr.		

Prescribe: Rx—One to two capsules three or four times daily.

Indications: Obesity.

Remarks: The thyroid and pituitary both have to do with metabolism. Hypofunction of either results in decreased and sluggish metabolism. By combining these glands with phytolaccin, apocynum and Organotones No. 12, very satisfactory results have been obtained.

ORGAN-O-TONES No. 4 (Ovarian Co.)

Ovarian substance	3 grs.	Thyroid substance	1/10 gr.
Pituitary (total)	1/8 gr.	Organotones No. 12	2 grs.

Prescribe: Rx—Organ-o-tones No. 4—Ovarian Co. One capsule four times daily, after meals and at bed time.

Indications: Amenorrhea; Dysmenorrhea; sexual apathy; sterility; irregularities at puberty and the menopause; malnutrition accompanying under physical development of young girls.

Remarks: One of the most effective of the endocrine remedies. Due to the fact that dysovarianism is more often of thyroid or pituitary origin than ovarian, this formula has proved beneficial in cases where ovarian substance alone had been tried without results.

Write us for Endocrine booklet.

COLE CHEMICAL COMPANY, Dep't R

3727 Laclede Avenue

St. Louis, Missouri

TESTOGAN

For Men

Formula of Dr. Iwan Bloch

THELYGAN

For Women

After eight years' clinical experience these products stand as proven specifics

INDICATED IN SEXUAL IMPOTENCE AND INSUFFICIENCY OF THE SEXUAL HORMONES

They contain SEXUAL HORMONES, i. e., the hormones of the reproductive glands and of the glands of internal secretion.

Special Indications for Testogan:

Sexual infantilism and eunuchoidism in the male. Impotence and sexual weakness. Climacterium virile. Neurasthenia, hypochondria.

Special Indications for Thelygan:

Infantile sterility. Underdeveloped mammae, etc. Frigidity. Sexual disturbances in obesity and other metabolic disorders. Climacteric symptoms, amenorrhea, neurasthenia, hypochondria, dysmenorrhea.

Furnished in TABLETS for internal use, and in AMPOULES for intragluteal injection.

Prices: Tablets, 40 in a box, \$1.75
100 in a box, 3.50

Testogan Ampoules, 12 in a box, \$2.50
Thelygan Ampoules, boxes of 12, 2.50

EXTENSIVE LITERATURE ON REQUEST

CAVENDISH CHEMICAL CORPORATION

88 Park Place

Sole Agents
Established 1905

New York

medical authorities, the work during the coming year will be devoted to researches on Insulin and Insulin therapy. The study of this problem has been of the greatest interest also in the Scientific Laboratories of Frederick Stearns & Company in the course of the development of their product, "Insulin-Stearns," which has been so extensively used in the treatment of diabetes.

Preventable Deafness

A recent editorial in the Washington Times says that "There are many cases of deafness from birth or early infancy, some due to microbes that attack the new born child. Twenty-five per cent of such attacks come from heredity, venereal blood disease—one of the worst enemies of the human race and one of the most dreadful punishments of vice."

Deafness of such origin may be total or partial, and it is usually an affliction of the internal ear. The defect is often not recognized until the child fails to talk, the attack of syphilis being unexpected and somewhat elusive. Syphilitic deafness, says the United States Public Health Service, need not be profound, but its gradual or sudden effect on the hearing capacity of the afflicted child often spells economic and social disaster, and it usually reduces life to an obscure and baffling existence. Fortunately, considerable progress has been made in the treatment of deafness of venereal origin, and the future promises still greater progress in its elimination. The early detection of diseased blood in the expectant mother is essential, so that the possible ear damage of the child may be prevented by adequate treatment of the mother before the birth of the child. The preparation and widespread dissemination of information relating to the prevalence, the detection and the prevention of venereal diseases is a most essential and productive health measure to which the United States Public Health Service devotes special attention.

Heredity in Medicine

The Association for Research in Nervous and Mental Disease is performing a valuable service in concentrating attention on a single topic at each of their meetings.

The facts and opinions brought forth are gathered into a volume each year. The latest volume has to do with heredity, and it forms a valuable introduction to the subject. The work is divided into five chapters. The first deals with the cell and chromosomes, and the influence of internal and external factors in heredity. Here a paper by Dr. C. W. Metz is of special importance; it is followed by a long discussion.

The second chapter is by Dr. Jelliffe and treats of the parts of the central nervous system which tend to exhibit morbid recessive or dominant characters. Chapter III deals with the pathological aspect of heredity in nervous disease by a number of authors. Heredity in the psychoses is discussed in the fourth chapter, and Heredity in Literature in a fifth. The whole constitutes a valuable discussion of human heredity and deserves a place in the library of every eugenicist.

U. S. Marine Hospitals Reduced Fire Hazards by Removing Old Inflammable X-Ray Films

The Surgeon General, U. S. Public Health Service, has issued general instructions to remove from the clinical record files as many of the used X-ray films of inflammable type as are not essential for record purposes. The storing of nitrocellulose films, especially when filed as a part of the clinical record, is, of course, well known to be a serious fire hazard and in conflict with the fire regulations of most cities. Boards of medical officers have been called in the various Marine Hospitals for the purpose. One of the larger institutions has eliminated approximately 600 pounds of the old style used films from its records. The material has a small sales value. The use of fire re-resisting films which are not more inflammable than ordinary paper, and the storage of which, therefore, presents no special problem, was introduced in all Marine Hospitals on July 1, 1924.

One inch of joy surmounts of grief a span.—*Rabelais*.

Young folks tell what they do, old ones what they have done, and fools what they intended to do.—*French Proverb*.

PLUTO WATER



Above is shown the home of Pluto Water.

Two Sizes

Pluto Water is bottled in two sizes—the large size is usually preferred, being most economical. Pluto is on sale at all drug stores.

Sample and literature to the Medical Profession on request.

FRENCH LICK SPRINGS HOTEL COMPANY, French Lick, Indiana



The De Lee-Hillis Head Stethoscope Latest Model

This most useful instrument should be part of the outfit of every obstetric practitioner. It will save many infants' and mothers' lives.

It was designed especially for use during the second stage of labor of both (spontaneous and operative), but it is even more useful for all the purposes of a stethoscope than the usual varieties. It is worn on the head after the doctor is (scrubbed up) for the delivery and enables him to listen to the fetal heart tones every minute or two without infecting his hands. He also listens to the mother's heart frequently to learn how it is bearing the strain of labor. In addition to this great advantage the head stethoscope has valuable acoustic properties.

Extraneous sounds are excluded; by pressure the bell can be applied in deeply, bringing it closer to the fetal heart—there may also be a little audition from bone conduction. It is made up with a band over the top of the head, with

a circular fibre head band

and, for easy portability, with a ribbon woven strap.

SHARP & SMITH

General Surgical Supplies

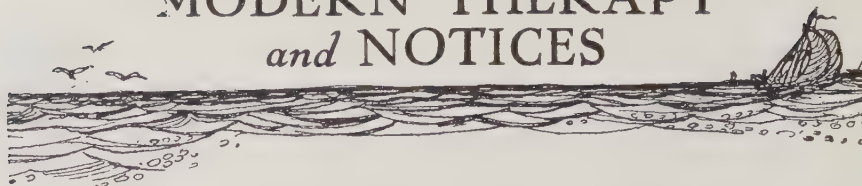
Price, \$7.50 Each

Est. 1844

65 E. Lake St., Between Wabash Ave. and Michigan Blvd., Chicago, Ill.

Inc. 1904

MODERN THERAPY *and* NOTICES



THE NEW SCARLET FEVER PRODUCTS

Scarlet fever has long been an enigma. Its cause was unknown and the treatment was entirely symptomatic and empirical. For years the idea was prevalent that a filterable virus was responsible for the disease. True, the earlier work on the bacteriology of scarlet fever indicated the presence of streptococci in the throats of scarlet fever patients, but these were then considered secondary invaders.

Beginning about 1912, a concerted attack, by a number of laboratory workers, was begun on the problem of scarlet fever and success has crowned their efforts, so that it is now possible to state that a certain type of streptococcus is the cause of scarlet fever. It has also been determined that the scarlet fever streptococci differ from other common forms of the streptococcus, that they possess certain peculiarities of their own, and that the specific organism is present in the throat and not usually in the blood stream in uncomplicated scarlet fever.

In seeking experimental proof that the streptococci were the causative factors of scarlet fever, laboratory animals were found insusceptible, but tests on human volunteers proved the point. Thus was the foundation laid for the succeeding steps. Proof was soon brought out that in scarlet fever the streptococci grow locally in the throat, but produce a soluble toxin which enters the blood stream. It is this toxin which

gives rise to the symptoms of scarlet fever.

The practical application of these findings led to (a) methods of producing and purifying the toxin (b) the use of the toxin in skin tests to determine susceptibility to scarlet fever (c) the use of the toxin for prophylactic immunization to establish an active immunity in susceptible individuals, and (d) the production of a scarlatinal antitoxin possessing the power to neutralize the scarlet fever streptococcus toxin.

The above outlines the main steps in the study of scarlet fever, to which many research workers have contributed. Much important work on the biology and classification of streptococci, including scarlet fever streptococci, has been carried on for a number of years at the Biological Laboratories of the H. K. Mulford Company. Their research staff have made important contributions to the methods of producing and purifying scarlet fever toxin. Their extensive facilities and long years of experience have been applied to the problem of producing an efficient and powerful scarlatinal antitoxin.

The result is that the medical profession now has available three highly specific and valuable Mulford Products. We refer to (1) SCARLATINAL TOXIN DIAGNOSTIC, which is used in the Dick Test, to determine susceptibility to scarlet fever, (2) SCARLATINAL TOXIN PROPHYLACTIC, which is offered in strength and dosage found safe but efficient in producing

RESTORES NATURAL BOWEL ACTION

AMONG the many remedies for constipation, bowel torpor, intestinal stasis or any form of dyschezia of functional origin, there is hardly one that has met with such instant approbation and acceptance by discriminating physicians as

AGAROL

A reasonable test of this scientifically balanced combination of pure mineral oil, agar-agar and phenolphthalein in some severe case of constipation will enable the practitioner to understand why Agarol is winning the regard and confidence of a constantly increasing number of medical men. He will find that Agarol

- 1st—produces prompt and satisfying bowel evacuations;
- 2nd—increases the bulk, softness and plasticity of the fecal mass;
- 3rd—imparts functional tone and power to the intestinal muscles;
- 4th—restores functional activity of the bowels so that satisfactory evacuations will follow regularly and continue without the need of further medication.

Agarol is not only a palliative of intestinal torpor—it is a true bowel corrective.

WILLIAM R. WARNER & CO., INC.

Manufacturing Pharmacutists since 1856

113-123 W. 18th STREET : NEW YORK CITY



It is a family duty to carry a Medical Protective Contract

The necessity is emphasized by the facts in file No. 03596. The following was received from our local attorneys, while the case was in process of litigation.

"I beg to advise that today Mrs. —, the wife of your assured in this case, called me by phone and advised that her husband, Dr. —, had died on March 24th.

"The case is now pending on demurrer and it is not likely that much if anything will ever be done with it, although of course they can go ahead and have the administrator or executor substituted."

After a lapse of six months the widow was served with a summons and in advising us, said among other things:—

"The Medical Protective Company, Fort Wayne, Ind.
Gentlemen:

I suppose they think that my husband, Dr. —, left a lot of money. The whole thing does not amount to Five Thousand Dollars, and I have three small children to raise."

The Doctor dead and the defense handicapped because he is not present to prove the propriety of his treatment, the widow financially unable to pay for own defense and endure a judgment; the raising and educating of three children dependent upon the wisdom of the Doctor in carrying a Medical Protective Contract.

TWENTY PERCENT OF WISDOM
CONSISTS OF BEING WISE
IN TIME

Arthur B. Garber, Genl. Agent
1142-4 Marshall Field Annex
Central 6278

for
Medical Protective Service.
Have a
Medical Protective Contract
The
MEDICAL PROTECTIVE
COMPANY
of
Fort Wayne, Indiana

active immunity to scarlet fever, and (3) SCARLATINAL ANTITOXIN, a new antitoxic serum of proven therapeutic efficiency, containing both antitoxin and antibacterial immune bodies.

For further information on these products,—methods of preparation, dosage recommended and packages supplied,—readers are referred to the H. K. MULFORD COMPANY, Philadelphia, Pa.

RESTORING MUSCULAR TONE TO THE SLUGGISH BOWEL

Schmidt was the first to point out that when the bowel contents are retarded in their passage, and abnormally retained in the intestinal canal, hyper-digestion is prone to take place, with over-absorption of fluids from the fecal mass, leaving it hardened and greatly reduced in bulk. In this state, the bowel residue is unable to provide the natural stimulus to the intestinal muscles which, as a consequence, become weak and inactive. With peristalsis thus impaired or lost, the intestinal wastes are still further delayed in their passage. Under these conditions a "vicious circle" is created, which it is easy to see, cannot be permanently broken by any ordinary laxative or evacuant.

Measures capable of restoring the natural physical conditions within the intestinal canal—in the bowel mass—are necessary, and in AGAROL—a palatable preparation of pure mineral oil, agar-agar and phenolphthalein—the practitioner has at his command a preparation that is able to render just this service. Administered in proper doses, it mixes thoroughly with the feces, thus making them soft, plastic and greatly increased in bulk. In this condition they furnish the necessary stimulus to peristalsis, and this, with lubrication both of the walls of the intestines and of the bowel mass, assures their

ready passage and satisfactory elimination.

Used for a reasonable length of time, therefore, AGAROL restores the muscular tone and functional activity of the bowel, with the gratifying result that regular evacuations will follow naturally after awhile without the need for further medical aid or assistance.

TONGALINE

"In this issue, the advertisement of Tongaline, the standard remedy for over 40 years, is worthy of the attention of every friend of the CHICAGO MEDICAL RECORDER, since a liberal quantity of this and of the effective Tongaline and Lithia Tablets will be sent complimentary to physicians who write for such. At this season the Tongaline Preparations are indicated in that broad field of complaints requiring prompt and thorough elimination."

Pershing Hotel

Cor. Cottage Grove Ave. and 64th St.
CHICAGO

Appealing particularly to the professional man who lives in keeping with his station yet not extravagantly, the Pershing, which is convenient to the great South Side hospitals and clinics is high in the favor of physicians and their families. Rates \$2.50 to \$5 per day single, \$3 to \$6 per day double. A quality of accommodations usually found only at the most expensive hotels distinguishes the Pershing.

Near the famed South Parks with their beaches, golf links, bridle paths and boulevards, the Pershing is also convenient to all Chicago via boulevard motor coaches, elevated express, surface cars and railroad suburban trains.

Entering Chicago, get off at 63rd St. or Englewood and you will be only a very short distance from the Pershing. For reservations or booklet address H. E. Rice, Pres. and Manager.

COLONIAL HOTEL

MOUNT CLEMENS - MICHIGAN



THE Colonial is Mt. Clemens' leading hotel and resort. Set in acres of beautiful park, it offers the utmost in rest and quiet, with baths and treatments all under the one roof. Rooms are furnished with unusual attention to taste and comfort, the service is of great excellence, and the meals extraordinarily good. Every facility for sports and pastimes, including sporty 18-hole golf course.

The Colonial may be reached from Detroit by interurban car passing the door or, upon appointment, by private motor without charge. Room and meals \$5.50 a day and up. An

all-year-round resort, September, October, November are ideal months.

For fully descriptive illustrated booklet, address W. W. Witt, President and Manager.

"NOBODY KNOWS LIKE AZNOE'S"



"Put your placement puzzles up to us for solutions and suggestions." This is the slogan of the first National Nurses' Registry in the world, founded twenty-nine years ago by H. B. Aznoe of Chicago, the present owner. The firm was originally organized to have nurses on call for local cases; today the local desk is but one of seven large departments, and the service extends to every section of the United States, Canada, and occasionally to some foreign land. Class A physicians, dentists, dietitians, technicians, as well as accredited graduate nurses, enjoy the privileges of this medical clearing house.

Mr. Aznoe has no peer in his work—no competitor. He has made a worthwhile contribution to the welfare of humanity as well as to the nursing and medical professions during his long years of continuous work as head of the Registry and of the National Physicians' Exchange.

Undoubtedly, Mr. Aznoe knows more about medical openings and how to fit the right man or woman into the vacancy than anybody else living. He is

a keen judge of human nature and has independently worked out all of the modern business methods productive of maximum efficiency. Mr. Aznoe's creed might be briefly stated: "Put Ethical Service before everything and Advertise, Advertise, and then Advertise some more." A corps trained in character analysis and scientific placement, with personal interest in each candidate, insures the careful consideration of every angle of every problem. Thousands of well-satisfied members and institutions attest the value of this work.

Only those applicants who measure up to a high standard of character and training are accepted; and none but ethical appointments are offered. Employers may without charge select candidates from confidential information secured by Aznoe's, thus eliminating embarrassment and loss of time.

Dependable, honest, intelligent, efficient—these are some of the qualities of Aznoe Coast to Coast Service.

From: *The July Hospital Medical Nursing World*, Toronto, Canada, July, 1925.



ELECTROLYSIS For Superfluous Hair

The only permanent cure known for superfluous hair, moles, warts, etc. I Positively Guarantee My Work to be Permanent. No Pains or Scars. I use Multiple Electrolysis (many needles), the quickest, cheapest and most reliable of all electric needle methods. Special attention to cases referred to me by physicians.

New York Office—347 Fifth Ave.
Minneapolis Office, 343 Loeb Arcade
Kansas City, 822 Chambers Bldg.

ELLA LOUISE KELLER

1200 North American Bldg., 36 S. State St.

Telephone Central 6468

CHICAGO



TO CLEAR THE OPERATING FIELD *Sterile, Antiseptic, Non-Irritant*

Use NEET—A bland cream that removes hair without irritating the skin.

In favor with many of the medical profession for depilating in preparation for delivery. Especially valuable if patient insists on home confinement.

Useful in preparation for all abdominal operations or operations on the pubic region.

Indicated where simple ulcers on vulva make shaving difficult and painful.

Relieves patient of the discomfort and risk attending the use of a razor.

Incoming growth is slower to reach the surface than if shaved, and is softer and finer than growth following the use of a razor.

A full size trial tube with complete instructions for use will be mailed without charge to any physician requesting it.

HANNIBAL PHARMACAL CO.,—612 Locust St.,—St. Louis, Mo.

"LEST YOU FORGET"

Sanmetto

A CALMATIVE
FOR



ALWAYS SOOTHING TO THE
MUCOUS MEMBRANES
OF THE UROGENITALS

SAMPLES TO PHYSICIANS ONLY

Od Chem. Co.
59-61 BARROW, NEW YORK

URETHRITIS
GONOCOCCUS

URETHRITIS
NON-SPECIFIC

→ CYSTITIS

→ DYSURIA

→ PROSTATITIS

→ VESICULITIS

→ PYELITIS

Douglas Park Maternity Hospital

Will take patients who wish to work for expense,
also pay patients.

1900 S. Kedzie Avenue

Chicago, Illinois



Department of Pathology, Bacteriology
and Serology



X-Ray Operating Room

The Columbus Laboratories

Established
1893

Expert Consultants

Suite 1406 & 1500, 31 N. State St. CHICAGO

Phone: Central 2740

OUR LABORATORY FINDINGS are the result of Thirty Years study of Medical and Chemical problems, assuring you of SCIENTIFIC ACCURACY and DEPENDABILITY.

OUR WASSERMANN TEST STANDS FOR ACCURACY!

X-RAY DEPARTMENT—most modern and completely equipped, including the interpretation of an Expert Roentgenologist, if desired, with Twenty Years Experience.

DRUGS AND MEDICINES analyzed for Strength—Purity—Composition.
Disinfectants and Germicides examined for Strength.
Sanitary problems studied and corrected.
Water and Milk Analyzed.

A LABORATORY OF PROGRESS—qualified to satisfactorily Solve Manufacturing and Industrial Problems; Investigate Patent and Legal Affairs; Analyze Foods, Flour, Grain, and Feed for Quality, Purity and Composition.



Salvarsan Room for Doctors



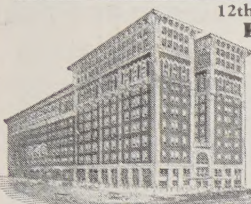
Chemical Research Department



HOTELS

Baltimore Muehlebach

12th Street and Baltimore Avenue
KANSAS CITY, MO.



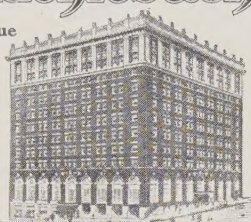
500 ROOMS

IN the very center of the business district, the combined buying power giving the best in room accommodations, cafe and dining service at fair prices.

S. J. WHITMORE,
Chairman

JOSEPH REICHL,
V-P and Gen. Mgr.

JOS. R. DUMONT, Mgr. Hotel Baltimore



500 ROOMS

Peacock's Bromides

An effective combination of five bromide salts that owes its exceptional therapeutic value to its purity, palatability and potency.

Indicated in headache, epilepsy, sleeplessness, uterine congestion and all reflex, convulsive and congestive nervous disorders.

Dose: One to three
drams p. r. n.

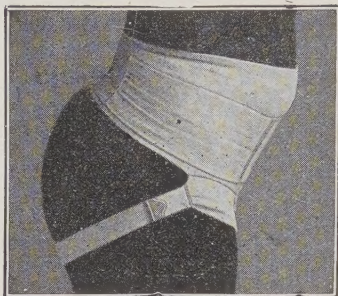
Chionia

A reliable preparation of *Chionanthus Virginica*.

Used with gratifying results in catarrhal jaundice, cholecystitis, auto-intoxication, gastro-intestinal disturbances, malarial infections and whenever cholagogue effect is desired without catharsis.

Dose: One to two teaspoon-
fuls t. i. d.

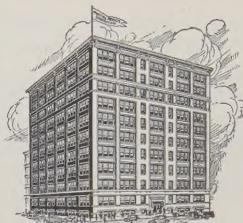
Peacock Chemical Company, St. Louis, Mo.

TRADE MARK
REGISTERED**STORM**TRADE MARK
REGISTERED**Binder and Abdominal Supporter**
(Patented)TRADE
MARK
REG.TRADE
MARK
REG.**FOR MEN, WOMEN AND CHILDREN**

For Ptosis, Hernia, Obesity, Pregnancy, Relaxed Sacro-Iliac Articulations, High and Low Operations, etc.

Ask for 36 page descriptive folder.

Mail orders filled at Philadelphia only—within 24 hours.

Katherine L. Storm, M. D.*Originator, Patentee, Sole Owner and Maker***1701 Diamond St., Philadelphia, Pa.**

One of the largest and most complete printing plants in the U. S.

Day and Night
ServiceBest quality work
handled by daylight*Let us estimate
on your next
printing order***Catalogue and Publication
Printers**

Artists—Engravers—Electrotypers

Business Methods and Financial Standing the Highest
(Inquire Credit Agencies and First Nat'l Bank, Chicago, Ill.)**WE PRINT***The*
**Chicago Medical
Recorder****Printing Products Corporation**

Formerly ROGERS & HALL COMPANY

Polk and La Salle Streets, Chicago, Ill.

Telephones—Local and Long Distance—Wabash 3380

**Cactina
Pillets**

A safe and dependable cardiac tonic that can be relied on to support, strengthen and safeguard the tired and weakened heart.

Invaluable for promptly relieving and overcoming tachycardia, palpitation, arrhythmia, tobacco heart and all cardiac ills of functional origin.

Dose: One to three
pillets t. i. d.**Prunoids**

A true intestinal corrective that produces physiologic evacuations from the bowel without griping, distress or after-constipation.

Employed with conspicuous success in the treatment of constipation, intestinal stasis, auto-intoxication and whenever thorough bowel elimination is needed.

Dose: One or two tablets
as needed**Sultan Drug Company, St. Louis, Mo.**

The prudent practitioner, being guided by the dictates of experience, relieves himself from disquieting uncertainty of results by safeguarding himself against imposition when prescribing

ERGOAPIOL (Smith)

The widespread employment of the preparation in the treatment of anomalies of the menstrual function rests on the unqualified indorsement of physicians whose superior knowledge of the relative value of agents of this class stands unimpeached.

By virtue of its impressive analgesic and antispasmodic action on the female reproductive system and its property of promoting functional activity of the uterus and its appendages, Ergoapiol (Smith) is of extraordinary service in the treatment of

AMENORRHEA, DYSMENORRHEA
MENORRHAGIA, METRORRHAGIA

ETC

ERGOAPIOL (Smith) is supplied only in packages containing twenty capsules. DOSE: One to two capsules three or four times a day. * * * Samples and literature sent on request.

MARTIN H. SMITH COMPANY, New York, N. Y., U. S. A.

Insulin

Mulford

The H. K. Mulford Company, operating under license from the University of Toronto, are pleased to announce the production and distribution of INSULIN-MULFORD, for the treatment of Diabetes.

INSULIN-MULFORD will conform strictly to the standards established by Drs. Banting and Best, developed in the physiological laboratory of Prof. J. J. R. MacLeod, of the University of Toronto.

The Mulford standards of purity, potency and uniformity established on biological products and assayed pharmaceuticals will be fully maintained in the production of Insulin.



In 5 cc Vials

10 Unit Insulin-Mulford—10 units per cc.

20 Unit Insulin-Mulford—20 units per cc.

40 Unit Insulin-Mulford—40 units per cc.

Order from your druggist or from nearest
Mulford Branch



H. K. MULFORD COMPANY, Philadelphia, U. S. A.
Manufacturing and Biological Chemists

66475

Mulford

THE PIONEER BIOLOGICAL LABORATORIES